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MUCK VEGETABLE

~ 1982 ~

CULTIVAR TRIALS

AND

RESEARCH REPORTS

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VEGETABLE CULTIVAR TRIAL REPORT FOR 1982

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SEED SOURCES - 1982

We wish to express our sincere thanks to all those who provided us with seed for trials.

A&C	Abbot & Cobb Inc., Box 307, Festerville, Pa., 19047
Agw	Agway Inc., Seed Division, Box 4933, Syracuse, New York 13221
Agr	See Sun Seeds
ARZ	A.R.Zwaan & Sons Ltd., Prinses Mariannelaan 296, Voorburg (ZH) Holland
Asg	Asgrow Seed Co., Box 610, Bradford, Ontario, LOG 1CO
Asm	Asmer Seeds Ltd., Asmer House, Ash St. Leicester, England LE5 ODD
Bee	Beemsterboer NV (See BEJO)
BEJO	Beemsterboer & Jacob Jong Seed Co.Ltd. Box 9, Noordscharwoude, Holland
BrS	Bradford Shippers Ltd. 270 Holland St. E. Bradford, Ontario, LOG 1CO also: Erie James, Leamington, Ontario
Bru	Bruinsma, bv, P.O. Box 24, Naaldwijk, 2670AA, Holland
Cro	Crookham Company, Box 520, Caldwell, Idaho, 83605
Des	Dessert Seed Co., Box 181, El Centro, California, 92243
DP	DVD Ploeg's Elite Zaden, BV NL3220, Barendrecht, Holland
DeR	DeRuiter Zonen BV, Bleiswijk, Holland
Enza	EnzaZaden, P.O.Box 7, Enkhuizen, Holland
FM	Ferry-Morse Seed Co. 111 Ferry Morse Way, Drawer 7274, Mountainview,Ca. 94042
Glo	Global Seeds, Box 1617, Gilroy, California, 95020 also: Box 1116, Nampa, Idaho, 83651
Guz	Prof. V.L.Guzman, Agriculture Research & Education Centre, Dept.of Hort. P.O.Drawer A, Belle Glade, Florida, 33430
Har	Harris Seed Co. Inc., Moreton Farms, Rochester, New York 14624
Her	Herbst Bros. 1000 N. Main St., Brewster, New York, 10509
JHK	J.H.Klitgord, Seedsman, Box 87, R.D.2, Mayville, New York 14757
Jung	J.W.Jung Seed Co., Randolph, Wisconsin, 53956
Key	Keystone Seed Co. (See Sun Seeds)
Kru	Krummrey & Sons Inc., Stockbridge, Michigan, U.S.A.
Mor	Moran Seeds Inc., 1155 Harkins Rd., Salinas, California, 93991
MSU	Michigan State Univ. Dept. of Horticulture, East Lansing, Michigan, 48823
NIPB	Nickerson International Plant Breeders, S.A., P.O. Box 1787, Gilroy, California, 95020
NK	Northrup King & Co., 1500 Jackson St. N.E., Minneapolis, Minn. 55413
Nun	Nunhem's Zaden, BV, Haelen, Holland

OhE	J.E. Ohlsens Enke, NY Munkegaard, DK-2630 Taastrup, Denmark
Pan	V.W.Pannevis, Zaadteelt en Zaadhandel BV, Westeinde 62, Box 2, Enkhuizen, Holland
PES	Peter Edward Seed Co., 115 Cardinal Lane, Eustis, Florida, 32726
PETO	PetoSeed Co. Inc., Box 4206, Saticoy, California, 93003
RS	Royal Sluis, Box 22, 1600 AA, Enkhuizen, The Netherlands also: Royal Sluis Inc., 1293 Harkins Rd., Salinas, Cal 93901
RZW	Rijk Zwaan, Burgemeester Crezeelaan 40, P.O.40, DeLier, Holland
Sak	Sakata & Co., C.P.O. Box Yokohama No 11, Yokohama 220-91, Japan
SG	Sluis en Groot, Box 13, Enkhuizen, The Netherlands and/or Sluis en Groot of America Inc., 124A Griffin St. Salinas, Ca. 93901
Sha	Charles Sharpe & Co. Ltd. Seaford Lines, England NG3 47HA
Sto	Stokes Seeds Ltd., 39 James St. Box 10, St. Catharines, Ont. L2R 6R6
Sun	Sun Seeds, 9531 West 78th St., Suite 229, Eden Prairie, Minn. 55344
Tak	Takii Co. Ltd., Box 7, Kyoto Central 180 Umekosi-Inokuma, Kyota 600-91 Japan
Tra	Trapp & Sons, Beulah, Michigan, USA
Twi	Otis S. Twilley Seed Co., Box 65, Trevosa, Pa. 19047
UnS	Union Seed Co., Box 339, Nampa, Idaho 83651
USDA	U.S. Dept. of Agriculture, Dr. C.E. Peterson, Dept. of Horticulture Univ.of Wisconsin, Madison, Wisc. 53706
UW	University of Wisconsin, Dept.of Hort., 1575 Linden Drive, Madison Wisc. 53706 Atten: Dr. Gabelman
VDH	Vanderhave, Box 1, 4420AA Rilland 3648, Holland
Ves	Vesey's Seeds Ltd., York, Prince Edward Island COA 1PO
ARZ	A.R.Zwaan - See ARZ
ZWS	Zwaan Seeds Inc., P.O. Box 127, Swedeboro, New Jersey 08085

* * * * * *

BRUSSELS SPROUTS - MAIN CULTIVAR TRIAL - 1982

Cultivar	Source	Date of Harvest	Mkb.Yield t/ha	Mkb.Yield t/a	% Mkble	Reason Unmkble	Wt/sprouts (grams)	Length of stalk (cm)	Growth Pattern	Natural Defoliation	Uniformity of Maturity	Firmness	Presence of Alternaria	Appearance of Sprouts
Lunet	RS	0.18	15.9	7.1	85	R	15	57	C	3.3	3.9	4.4	4.5	4.0
Craton	RS	0.14	13.7	6.1	66	R	16	50	MP	3.3	3.1	3.3	3.9	3.0
Silverstar	BEJO	0.5	12.3	5.5	49	RA	19	51	M	3.4	2.9	4.0	3.0	4.0
Titurel	S&G	0.14	12.2	5.4	61	RS	19	48	M	3.7	3.0	3.9	3.9	4.7
Acropolis	RS	0.14	12.2	5.4	68	AR	17	53	M	3.6	3.3	3.9	3.7	3.7
Kronos	DP	0.5	11.3	5.0	54	LR	17	47	P	3.3	2.2	3.9	3.9	4.3
Green Marvel #7	Sak	0.5	11.0	~~5.4~~ 4.9	49	LAR	11	43	P	3.0	2.0	3.7	---	3.3
Prince Marvel	A&C	0.5	10.6	4.7	44	AR	15	53	PM	3.5	2.8	4.1	3.5	3.7
Porter	RS	0.18	10.2	4.6	61	R	16	53	CM	2.3	3.3	3.7	4.0	4.3
Alcazar	RS	0.5	8.6	3.9	47	RA	18	49	PM	2.9	2.3	3.9	3.1	4.0

The Main Trial is listed in order of t/ha. Seeded April 14 in a greenhouse and transplanted to a field of Schomberg clay loam on May 25 at a spacing of 90 x 60 cm. The Main Trial was replicated three times.

The plants were stopped when 60% of the sprouts measured 20 mm in diameter. The once-over-narvest took place when the majority of the sprouts measured over 25 mm and were mechanically removed from the stalks. The plants received less nitrogen in the fertilizer than other years and no lodging of the stalks occurred. No internal browning was observed. The cultivar Alcazar had some sprouts with pink centers.

Legend: 5= most desirable. 1=least desirable

Reason unmarketable: R=Rot,decay L=Loose,large,blown up S=Soft A=Alternaria damage O=Oversize

Growth Pattern: -Sprouts development on the stalk in the shape of a Pyramid = P, with the bottom sprouts developing much earlier and faster than the top sprouts, or:
-Cylindrical = C, when all sprouts developed uniformly. M=Medium

A high mark for natural defoliation signifies that the cultivar is suitable for this climate and loses its leaves at or before maturity of the sprouts.

A high mark for appearance of sprouts (eye appeal) signifies a firm clean looking sprout without loose, "wingy" leaves.

BRUSSELS SPROUTS CULTIVAR ADAPTATION TRIAL - 1982

Cultivar	Source	Date of Harvest	Mkble Yield t/ha	Mkble Yield t/a	% Mkble	Reason Unmarketable	Wt/Sprouts (grams)	Length of stalk (cm)	Growth Pattern	Natural Defoliation	Uniformity of Maturity	Firmness	Presence of Alternaria	Appearance of Sprouts
Cavalier	ARZw	0.14	11.3	5.0	66	R	18	50	P	4-	3-	4+	4	4
Dorema	"	0.14	14.9	6.6	50	RO	17	45	P	4	4-	4-	4-	4
Promethar	"	S.17	12.6	5.6	59	ORL	20	43	P/M	3	2	4	--	4
Sherpa	"	S.17	11.7	5.2	63	SR	15	50	M/C	3+	2	3	--	3-
Sonara	"	0.14	12.2	5.4	75	R	15	45	P	3-	2+	4	4-	4
Predora	BEJO	0.14	9.9	4.4	55	R	19	40	P	2	2	4-	4	4+
DP 135	DP	0.14	12.6	5.6	60	R	17	50	P	3-	2+	3+	3	3+
DP 136	"	0.14	10.8	4.8	55	RA	18	50	P	3	2+	4+	3+	4
Long Island Impr.	Her	S.17	Stalks too short, not harvested.											
Captain Marvel #8	Sak	0.14	Too small. Not harvested											
Merlin	RS	0.14	14.9	6.6	67	RA	21	55	P	3+	3-	4-	4	3+
Topscore	"	0.14	4.5	2.0	40	R	13	50	M	4-	3-	4	4-	4+
Mallard	Sha	0.14	8.1	3.6	44	R	17	50	M	4	2	4+	3+	4+
Widgeon	"	0.14	11.3	5.0	74	AR	15	50	C	4	4+	4	4	4+
Ivanhoe	S&G	0.14	9.9	4.4	54	R	16	50	C	4	4-	3	4	3
Kundry (SG65)	"	0.14	14.9	6.6	62	RSA	17	55	C	3	4-	4-	3	5-
Valiant	"	0.14	17.1	7.6	83	R	15	50	C	4-	4-	4-	3	4-
SG 664	"	0.25	11.7	5.2	87	--	13	50	MC	4	4	4+	5-	5-
Lancelot	"	0.14	22.0	9.8	69	O	18	45	P	4-	1	3+	3	3
Jade Cross "E"	Tak	0.14	14.9	6.6	56	RL	20	50	P	3	1	3+	3	4-
52-301	"	0.14	19.8	8.8	67	AR	19	45	M	2	4	4-	3	4
Jade Cross "H"	"	0.14	10.8	4.8	47	AR	16	64	M	2	4	4+	3	4
Jade Cross Regular	"	S.17	13.5	6.0	75	SA	15	33	P	3-	1	4+	-	4

CARROT CULTIVAR TRIALS - PACKAGING TYPES

The soil was rotovated to a depth of 25 cm while the water table was kept at 90 cm.

The Main Trial was replicated 3 times.

The trials were seeded May 21 in rows 50 cm apart with a V-belt seeder equipped with a 5 cm wide scatter shoe. The plants were thinned to approximately 12 per 30 cm. A regular spray program was followed up to Sept.1. After that, no fungicides were used to check for resistance to leaf blight.

After harvest on Oct.12, the roots were placed in a common storage and judged on Nov. 15, 1982.

Legend:

Type: GPI = Gold Pak - Imperator LDN = Long Danvers - Nantes Sd = Spartan with some Danvers in it.
Stand/meter: 40 plants/m = 12 plants/foot
Length and Width: 10" = 25 cm 1.5" = 3.8 cm
5 = most desirable 1 = least desirable

The majority of culls were forks. Very little Rusty Root was observed. In the main trial, only Gold Pak 263 Javelin 80 and Gold Pak 28 were lightly affected.

Horizontal Lesions and Degree: The percentage of roots that have horizontal lesions (cavity spots) and to what degree they appear on these roots.
VL = Very Light M = Medium VH = Very Heavy, root not marketable

*Slicer types: The degree to which the shape makes it suitable for slicers. In the main trial, Klondike Nantes with a mark of 3.3 and Sp.Premium 80 with a mark of 3.0 received the highest mark, which makes them only marginally suitable for slicers. For a list of slicer types out of the other trials, see Index.

Score: The average of 7 marks excluding Horizontal Lesions (Cavity Spot), Blight and Rusty Root.

The Main Trial is listed in order of length of roots.

Besides the regular Main Trial, a similar trial was seeded to find the earliest and fastest maturing varieties and a trial was seeded in mineral soil reported elsewhere in this booklet - see Index.

CARROT CULTIVAR STORAGE TRIAL - 1981/82 - PACKAGING TYPES

Cultivar	Source	% Marketable	% Weight Loss in Storage	% Decay	Degree of Decay *
Canuck	Sto	95	5	0	5
Chancellor	Asg	95	4	1	1
Imperator 58	Glo	93	6	1	3
Dagger 78	Des	93	3	4	4
Saber 78	"	93	3	4	4
Spartan Fancy 80	Sto	92	8	0	2
Spartan Delux	Cro	92	7	1	1
Spartan North "A"	"	92	7	1	3
Cutlass	Des	92	6	2	3
Klondike Nantes	Sto	92	5	3	4
Javelin 80	Des	91	8	1	3
Spartan Classic 80	Sto	91	8	1	1
Gold Pak	Glo	91	7	2	3
Lance	Des	91	6	3	3
Trophy	Har	90	9	1	2
King Imperator	Sto	90	7	3	3
Orange Sherbet	"	89	9	2	3
Pakmor	Har	89	8	3	4
Spartan Premium 80	Sto	89	9	2	2
Six Pak	Har	89	8	3	4
Grenadier	"	87	8	5	3
Spartan Sweet 'A'	Cro	86	9	5	3
Spartan Delight 80	Sto	85	12	3	2
Candy Pak	FM	85	13	2	2
Average All Cultivars		90.5	7.3	2.2	2.8

* 5=most desirable, no decay

Harvest Date: October 5, 1981.

In common storage until November 25.
In refrigerated storage until June 25, 1982
Total storage period - 33 weeks.

CARROT CULTIVAR MAIN TRIAL - 1982 - PACKAGING TYPES

Listed in order of length.

Cultivar	Source	Mkb.Yld. Tonnes/ha	Mkb.Yld. Bushels/Ac	% Oversize	% Mkble	Stan/meter	Roots Length (cm)	Roots Width (cm)	Uniformity Shape	Uniformity Size	Appearance	Resist. to Greening	Color Interior	Color Exterior	Core Size	% Horiz.Lesions & Degree	Blight	Length of Tops (cm)	Score
Trophy	Har	79	1412	23	88	35	25	3.6	4.3	4.3	4.1	4.6	4.5	4.2	4.7	60VL	5.0	48	4.39
Javelin	Des	59	1041	13	84	28	25	3.6	4.3	4.1	3.7	4.4	4.2	4.3	4.6	93VL	4.7	46	4.23
Sp.North 'A'	Cro	76	1353	32	87	28	25	3.7	4.3	4.0	4.2	4.3	4.7	4.3	4.7	100VL	5.0	42	4.36
Grenadier	Har	83	1472	26	84	38	24	3.6	4.3	4.4	4.3	4.2	4.3	4.1	4.7	93VL	4.0	51	4.33
Saber 78	Des	72	1276	17	81	34	24	3.5	4.3	4.2	3.6	4.4	4.6	4.1	4.7	50VL	5.0	51	4.27
Canuck	Sto	71	1264	23	79	36	24	3.5	4.3	4.1	4.1	4.4	4.6	4.3	4.8	100VL	4.0	43	4.37
Dagger 78	Des	89	1584	27	89	45	24	3.6	4.2	4.1	3.7	4.7	4.6	4.3	4.7	100L	4.7	46	4.33
Candy Pak	FM	72	1285	20	87	32	23	3.6	4.3	4.3	4.0	4.4	4.8	4.3	5.0	67L	5.0	39	4.44
Goldpak 263	Asg	71	1258	12	84	41	23	3.6	3.9	4.1	3.8	3.5	4.7	4.2	4.2	60L	5.0	44	4.06
Cutlass	Des	75	1335	16	77	44	23	3.8	4.1	4.2	4.1	4.4	4.3	3.9	4.7	66L	4.7	47	4.24
L.Imperator 58	Asg	54	958	8	79	39	23	3.5	4.3	4.0	3.8	4.0	4.1	3.9	4.0	73M	4.7	49	4.01
Sp.Delite 80	"	91	1611	21	87	49	23	3.7	3.8	3.3	3.4	4.2	4.1	3.9	4.7	47VL	4.0	42	3.91
Paramount	"	86	1534	15	83	48	22	3.6	3.7	3.7	3.8	3.6	4.3	4.0	4.5	67L	5.0	44	3.94
Diplomat	"	84	1486	23	84	48	22	3.8	4.0	4.0	3.8	3.8	4.2	4.0	4.3	83L	4.7	48	4.01
Sp.Fancy 80	"	76	1350	21	81	36	22	3.6	4.2	4.1	3.6	4.0	4.2	3.8	4.8	70L	4.7	47	4.10
Six Pak	Har	77	1362	6	83	50	22	3.6	4.1	4.2	3.7	4.4	4.6	4.2	4.6	80VL	4.7	45	4.26
Chancellor	Asg	71	1267	23	78	31	22	3.6	3.9	3.8	4.1	4.2	4.4	3.9	4.6	87VL	5.0	54	4.13
Pakmor	Har	71	1267	20	82	38	22	3.4	3.6	3.8	3.3	4.3	4.2	3.9	4.6	60L	4.7	53	3.96
Sp.Premium 80	Cro	89	1584	27	83	39	22	3.8	3.8	4.1	4.2	3.9	4.1	4.0	4.7	87L	4.3	40	4.11
Gold Pak 28	Sto	69	1228	9	85	47	22	3.6	3.4	3.7	3.2	3.9	4.3	4.0	4.6	77L	5.0	47	3.87
Hipak	Har	69	1234	21	83	31	21	3.7	4.0	4.2	4.0	3.3	4.1	4.1	4.3	53VL	5.0	43	4.00
Lance	Sto	78	1384	26	77	36	20	3.8	4.0	3.8	3.3	4.6	4.5	4.0	4.6	73VL	5.0	43	4.11
Klondike Nantes	"	75	1341	31	80	34	20	3.7	4.2	4.1	4.3	3.8	4.2	4.2	4.4	80VL	4.7	43	4.17
Sp.Deluxe 80	Asg	86	1534	34	89	46	19	3.6	3.5	3.3	3.1	4.3	4.2	3.9	4.5	87VL	4.7	47	3.83

LONG TERM AVERAGES OF CARROT CULTIVARS - PACKAGING TYPES

Listed in order of length.

5 = most desirable

Cultivar	Source	# Years Tested	LTA Length cm	LTA Length Inches	LTA Yield t/ha	LTA Yield B/A	% Mkble	LTA Score
Javelin 80	Des	3	23.87	9.40	54.67	970	82	4.18
Candy Pak	FM	6	23.42	9.22	64.78	1153	83	4.31
Dagger	Des	4	23.40	9.21	69.00	1229	85	4.30
Saber 78	"	3	23.30	9.17	56.67	1007	80	4.19
Sp.North "A"	Cro	6	23.12	9.10	66.61	1186	84	4.19
Sp.Delite 80	MSU	4	22.88	9.01	77.25	1376	89	4.08
Orange Sherbet	Sto	3	22.60	8.90	62.83	1119	83	3.78
Cutlass	Des	6	22.58	8.89	67.57	1203	81	4.02
Six Pak	Har	3	22.23	8.75	71.67	1272	89	4.29
Sp.Fancy 80	Cro	4	22.00	8.66	68.50	1219	84	4.01
Imperator 58	"	9	21.69	8.54	50.34	896	78	3.64
Trophy	Har	10	21.60	8.50	64.02	1140	84	3.99
Gold Pak 263	Asg	6	21.58	8.50	60.67	1079	85	3.91
Diplomat	"	3	21.37	8.41	73.00	1294	88	4.00
Pakmor	Har	2	21.30	8.39	59.00	1056	78	3.82
Chancellor	Asg	3	21.23	8.36	67.33	1200	80	3.83
Lance	Des	6	21.22	8.35	64.98	1156	83	4.08
Sp.Premium 80	Cro	4	21.20	8.35	80.75	1437	86	3.95
Grenadier	Har	14	21.11	8.31	65.94	1173	84	3.98
Sp.Winner 80	Cro	3	21.10	8.31	73.33	1306	82	3.78
Canuck	Sto	14	20.86	8.21	61.52	1095	81	3.97
Gold Pak 28	FM	12	20.75	8.17	55.91	996	85	3.84
Paramount (XP159)	Asg	5	20.50	8.07	85.20	1517	86	3.92
Sp.Sweet 'A'	Cro	13	20.33	8.00	69.68	1240	82	4.12
King Imperator	NK	10	20.19	7.95	52.71	938	83	3.75
Sp. Deluxe	MSU	9	19.96	7.86	70.80	1260	84	3.97
Dominator	Sun	12	19.63	7.73	63.05	1122	85	3.86
Klondike Nantes	Sto	10	19.59	7.71	72.10	1283	85	3.87
Hipak	Har	13	19.26	7.58	65.46	1166	86	3.84
Sp.Classic 80	Cro	3	17.93	7.05	63.33	1127	78	3.78
Pioneer	Har	10	16.60	6.54	64.00	1139	81	3.61
Scarlet Nantes	Asg	8	14.50	5.71	66.00	1175	75	3.46

CARROT CULTIVARS ON MINERAL SOIL - 1982

The cultivars are listed in order of length. 5 = most desirable 1 = least desirable

Cull types: The types mentioned are those most prevalent.
F = Forked C = Crooked U = Undersize
S = Split R = Rot (storage rot not considered)

% Horizontal Lesions: 93 VL means that 93% of the roots had horizontal lesions or cavity spots very small in size and number.
VL = Very Light M = Medium H = Heavy, many large lesions

Appearance: Mark given for eye appeal of roots, considering smoothness, slenderness, straightness, etc.

The Score is the average of the seven marks given for quality.

Management Practices:

The Granby sandy loam was deeply rotovated and raised beds were formed that were 140 cm wide at the top with 3 rows per bed, spaced 57 cm apart.

Seeding took place on May 19 with a V-belt seeder equipped with a 5 cm wide scatter shoe at 80 seeds/meter in a 3 times replicated trial.

Normal crop protection practices were followed.

The roots were harvested on October 8th and placed in a refrigerated storage.

Data was taken on November 18, 1982.

Listed in order of length.

CARROT CULTIVAR TRIAL ON MINERAL SOIL - 1982 - PACKAGING TYPES

Cultivar	Source	Mkb.Yld. Tonnes/ha	Mkb.Yld. Bushels/Ac	% Oversize	% Mkble	Type of Culls	Stand/meter	Roots Length (cm)	Roots Width (cm)	Uniformity Shape	Uniformity Size	Appearance	Resist. to Greening	Color Interior	Color Exterior	Core Size	% Horiz.Lesions & Degree	Score
Pakmor	Har	72	1281	9	85	F	47	24	3.4	4.1	3.9	4.1	4.3	4.1	3.8	4.3	93VL	4.09
Saber 78	Des	75	1337	13	90	C	41	23	3.4	4.3	4.2	4.0	4.5	4.2	4.1	4.4	40VL	4.24
Sp.Delite 80	Asg	58	1033	4	86	UF	47	23	3.3	4.2	4.0	3.9	4.1	4.3	4.1	4.6	67VL	4.17
Sp.North 'A'	Cro	58	1033	11	91	U	40	23	3.3	3.9	3.9	3.8	4.4	4.1	3.9	4.4	87VL	4.06
Dagger 78	Des	66	1167	11	91	FC	47	22	3.2	4.3	4.0	3.9	4.3	4.4	4.3	4.6	53VL	4.26
SixPak	Har	68	1203	4	92	U	47	22	3.3	4.3	4.2	4.2	4.4	4.3	4.0	4.7	53VL	4.30
Trophy	Har	70	1239	1	92	U	53	22	3.2	4.0	3.9	3.5	4.4	4.2	4.1	4.4	53VL	4.07
Grenadier	"	59	1042	18	89	F	43	22	3.2	4.3	4.0	4.0	4.6	4.2	4.0	4.2	47VL	4.19
Chancellor	Asg	78	1389	4	86	U	69	22	3.3	4.0	3.6	3.8	4.2	4.1	4.0	4.4	73VL	4.01
Sp.Fancy 80	"	58	1038	2	84	--	50	22	3.2	4.2	3.9	3.6	4.2	4.2	4.1	4.4	60VL	4.09
Canuck	Sto	55	983	7	89	R	41	22	3.1	4.1	3.7	3.8	4.4	4.6	4.0	4.6	87VL	4.17
Javelin 80	Des	50	883	9	83	FC	34	22	3.2	4.1	4.1	3.9	4.1	4.3	4.0	4.4	100VL	4.13
Cutlass	Des	65	1161	9	85	F	54	22	3.2	3.8	3.9	3.6	4.3	4.0	4.2	4.3	57VL	4.01
L.Imperator 58	Asg	59	1043	8	91	UC	41	22	3.3	3.9	3.9	3.5	4.3	4.0	4.1	4.2	45VL	3.99
Candy Pak	FM	45	806	2	92	U	34	21	3.3	4.3	3.8	3.1	4.4	4.6	4.2	4.4	60VL	4.11
Gold Pak 28	Sto	82	1466	15	91	UC	56	21	3.4	3.8	3.8	3.4	3.6	4.3	4.1	4.3	60VL	3.90
Sp.Premium 80	Cro	84	1487	6	91	CS	56	21	3.4	4.1	4.2	4.2	4.2	4.4	4.2	4.3	67VL	4.23
Paramount	Asg	90	1610	15	90	U	64	21	3.4	4.1	3.6	3.4	4.4	4.1	3.8	4.1	53L	3.93
Klondike Nantes	Sto	85	1507	13	89	S	47	21	3.5	4.1	3.9	3.7	4.0	4.6	4.1	4.6	67VL	4.14
Diplomat	Asg	85	1508	13	88	US	58	21	3.3	4.0	3.9	3.8	4.2	3.9	3.9	3.9	60VL	3.94
Goldpak 263	"	49	873	4	82	UF	45	20	3.3	4.1	3.7	3.8	4.0	4.3	4.0	4.2	87L	4.01
Lance	Sto	71	1270	22	91	U	42	20	3.3	3.8	3.6	3.6	4.6	4.1	4.0	4.6	73VL	4.04
Sp.Deluxe 80	Asg	66	1182	9	84	U	55	19	3.5	4.0	3.6	4.0	4.0	4.3	4.2	4.4	47VL	4.07
Hipak	Har	78	1383	30	93	U	44	19	3.4	3.9	3.8	3.4	3.8	4.0	3.8	4.3	47VL	3.86

EARLY MATURITY OF CARROT CULTIVARS - PACKAGING TYPES

Seeded: May 19,1982

Cultivar	Source	Marketable t/ha			Acceptability		
		Aug.11	Aug.18	Aug.25	Aug.11	Aug.18	Aug.25
Paramount	Asg	24	39	54	4.0	3.8	4.5
Dagger 78	Des	22	31	43	4.3	4.0	4.1
Spartan Winner	Sto	22	32	43	4.2	4.1	4.6
Grenadier	Har	23	37	39	3.9	4.2	3.9
Trophy	"	22	38	49	3.9	4.2	4.3
Spartan Premium 80	Cro	21	29	48	3.8	3.8	4.1
Hipak	Har	20	26	39	4.0	3.6	3.7
Klondike Nantes	Sto	21	41	51	3.7	3.2	4.6
Lance	"	21	28	39	3.7	3.9	4.5
Spartan Classic	Cro	25	40	51	3.0	4.3	4.7
Diplomat	Asg	17	32	49	4.1	4.0	3.8
Cutlass	Des	18	31	41	4.0	4.0	4.3
Spartan Delite 80	Asg	19	32	45	3.7	3.8	3.9
Spartan Delux 80	"	21	33	46	3.2	3.8	4.0
Spartan Fancy 80	"	16	31	43	3.8	3.8	4.1
Pakmor	Har	18	30	43	3.8	3.9	4.6
Six Pak	"	20	29	48	3.5	3.9	4.2
Canuck	Sto	16	29	42	3.5	3.8	3.9
Chancellor	Asg	18	29	41	3.5	3.5	3.8
Spartan North 'A'	Sto	16	26	38	3.5	3.9	4.0
Javelin 80	Des	14	18	33	3.9	3.1	4.1
Candy Pak	FM	12	23	35	3.2	3.7	3.8
Saber 78	Des	12	22	33	3.8	3.4	3.9
Gold Pak 263	Asg	16	24	24	3.1	3.4	3.1
Long Imperator 58	"	9	22	37	2.8	2.8	3.1

Notes:

Listed in order of earliness and early yield. Seeded: 60 seeds/m 5=most desirable

1000 b/a = 56 t/ha 400 bushels/acre = 22.5 tonnes/hectare.

CARROT ADAPTATION - PACKAGING - 1982

Cultivar	Source	Mkb.Yld. tonnes/ha	Mkb.Yld. Bushels/Ac	% Oversize	% Marketable	Types	Stand/meter	Roots Length (cm)	Roots Width (cm)	Uniformity Shape	Uniformity Size	Appearance	Resistance to Greening	Color Interior	Color Exterior	Core Size	% Horiz.Lesions & Degree	Blight	Score
Brite Pak	A&C	86.0	1531	12	89	DGP	44	22.5	3.5	4-	4-	4	4	4-	4	4+	100M	5	3.91
ACX-821678	"	70.5	1255	8	90	GP	50	23.0	3.5	4+	4-	4+	4	5-	4+	5-	100L	2	4.29
Texsun	FM	60.5	1077	18	78	D	40	19.4	3.4	4-	3	3	3	4	4-	4	80L	5	3.49
FM-X151	"	70.5	1255	23	82	DGP	33	21.8	3.5	4-	4-	3+	4-	4	4-	4+	100VL	4	3.77
FM-X166	"	97.5	1736	10	88	GPD	56	23.5	3.6	4-	4	4-	3+	4	4-	4	100M	5	3.77
Nuggeteer	"	85.5	1522	34	87	ID	36	23.5	3.6	4+	4-	3	4-	4-	4+	4+	100L	5	3.86
Caramba *	S&G	32.5	579	0	35	N	53	17.7	3.3	4+	3+	3+	2+	5-	4	5-	100M	5	3.80
Little Finger	"	15.5	276	0	44	N	37	15.6	3.2	--	--	--	2	3+	4-	4+	80L	5	--
Tip Top *	"	51.0	908	39	90	N	24	21.6	4.0	4+	5-	4+	2	3	4-	3+	100L	5	3.61
Nanthia *	"	90.5	1611	8	71	N	60	19.6	3.9	5-	3+	4+	2	4+	4	4+	--	4	3.84
Hytop *	"	97.0	1727	27	83	N	33	20.5	4.1	4+	4+	4+	2	4+	4	4	100L	5	3.89
SG 764 *	"	50.0	890	22	52	--	32	18.4	3.6	4+	4-	4+	2	3	4-	3	100M	4	3.43
1006 F1	BEJO	71.5	1273	30	83	DN	44	17.7	3.9	3+	4-	3+	3	4+	4-	4+	100L	5	3.66
1010 F1 *	"	67.0	1193	19	86	N	40	18.1	3.4	5-	4	4+	3-	4+	4	4+	100L	5	4.04
ARZ 68 F1 **	NIPB	98.5	1753	58	77	D	35	16.9	4.2	4	3	3+	4-	5-	4	4+	80M	5	3.86
ARZ 90 F1	"	79.5	1415	22	90	GPDN	28	21.2	3.8	3	3+	3+	3+	4-	4	4-	100L	5	3.47
ARZ 91 F1	"	95.0	1691	23	91	ND	36	21.8	3.9	3	4	4	3+	4	4+	4	100VL	5	3.80
ARZ 134 F1	"	74.5	1326	49	95	DN	26	18.8	3.8	3+	3+	3	4	5-	4	4+	100M	5	3.80
ARZ 135 F1 *	"	92.0	1638	24	86	Nd	42	21.0	3.9	4	4	4+	4-	5-	4	4+	80VL	5	4.14
ARZ 137 F1 **	"	94.5	1682	48	84	DN	47	16.1	4.0	4	3+	3+	3	4+	4-	5-	60VL	4	3.76
ARZ 147 F1	"	70.0	1246	35	85	Sd	31	20.9	3.8	3+	3+	4-	4	4+	4	4	100VL	5	3.80
ARZ 149 F1	"	85.0	1513	38	88	SD	32	22.3	3.7	3	3	3+	3+	4	4-	4	80VL	4	3.47
XPH 987	Asg	68.5	1219	7	82	GP	42	24.0	3.8	4+	4	4+	4+	4+	4-	4+	100VL	4	4.17
XPH 568	"	94.5	1682	8	88	GPN	57	21.8	3.4	3	3	3+	3	5-	4+	5-	100L	5	3.71
XPH 569	"	81.0	1442	7	91	GPD	36	25.3	3.6	4	4	4-	4-	4	4+	4+	80VL	5	4.00
XPH 977	"	64.0	1139	4	87	GP	31	23.3	3.6	4+	4+	4+	4+	4+	4+	5-	100M	5	4.36

CARROT ADAPTATION - PACKAGING - 1982

Cultivar	Source	Mkb.Yield tonnes/ha	Mkb.Yield Bushels/Ac	% Oversize	% Marketable	Types	Stand/meter	Length (cm)	Width (cm)	Uniform Shape	Uniform Size	Appearance	Resistance to Greening	Color Interior	Color Exterior	Core Size	% Horiz.Lesions & Degree	Blight	Score
XPH 979	Asg	76.0	1353	30	84	DGP	28	24.5	3.6	4+	4+	4+	4-	4-	4-	4+	100L	4	4.04
XPH 980	"	69.5	1237	46	88	DGP	28	22.0	3.6	3	3	3	4-	4+	4	5-	100L	4	3.67
XPH 981	"	85.0	1513	19	89	GPI	39	24.3	3.7	5-	5-	4+	4+	3+	4+	5-	80L	5	4.33
Spartan Winner	Sto	76.0	1353	27	82	DN	34	20.9	3.6	3+	4-	3+	3	4	4	5-	100VL	5	3.71
King Imperator	"	85.5	1522	13	98	DGP	37	25.2	3.6	4+	4	4-	4+	3-	4-	4	60L	5	3.81
UP #5	"	87.5	1558	21	76	GPD	33	24.2	3.6	3+	4-	3	3	3+	4-	4	100M	5	3.43
Sucram	"	49.0	872	4	70	N	34	18.2	3.8	4+	4-	3-	2	4+	4-	4+	100VL	5	3.57
Sp.North	"	68.0	1210	32	92	DGP	28	23.4	3.9	3+	3+	4-	4	4+	4+	4+	100VL	3	3.89
Sp.Delight	"	82.5	1469	35	91	GPD	32	26.0	3.8	3+	4-	4-	4-	4	4	5-	100L	5	3.87
Sp.Fancy	"	63.0	1121	25	87	DG	44	23.9	3.8	4+	4	4+	4+	4+	4	5-	100M	4	4.27
Sp.Premium	"	81.5	1451	20	79	DN	39	22.5	3.8	3+	4	4+	4	3+	4-	4+	100VL	4	3.84
Orange Sherbet	"	73.5	1308	29	94	GP	31	23.6	3.5	4+	4+	4+	4-	5-	4-	4+	100L	5	4.19
#4256 *	"	66.5	1184	19	81	N	32	20.9	3.7	4+	4+	4+	4-	4-	4	4+	100L	5	4.09
#4255	"	60.0	1068	7	86	Id	27	27.0	3.6	4+	4	4+	4	4+	4+	4+	100L	5	4.21
Berlikum Berjo *	"	58.0	1032	10	83	N	40	20.8	3.7	4+	4-	3	2	3	3+	3-	100M	5	3.14
Flacora **	"	63.0	1121	46	89	Dn	30	17.8	4.0	3+	4-	3	2	3+	4-	3	100VL	5	3.14
Rola **	"	90.0	1602	6	96	C	37	16.7	4.5	4	3+	4-	3-	3	4-	2	100L	5	3.20
Bridge	"	47.0	837	6	87	N	27	21.3	3.6	4	4-	4-	3+	4+	4	4+	80VL	5	3.90
N148	Cro	82.5	1469	39	92	GPd	29	23.4	3.7	4+	4+	4+	4	4	4	4+	100VL	4	4.17
N149	"	64.0	1139	12	86	GP	34	24.1	3.7	4	4-	4-	4-	4+	4-	4+	60L	5	3.91
N150	"	76.0	1353	9	87	GPd	41	24.8	3.6	4+	4	4-	4-	4	4	5-	100VL	5	4.06
W387	"	81.5	1451	23	93		36	24.8	3.6	4+	4+	4+	4	4+	4-	4+	80L	5	4.17
W456	"	45.0	801	4	67	GPI	39	24.0	3.5	4-	3+	4	4+	5-	4+	5-	80L	4	4.14
W458	"	45.5	810	13	85	I	22	25.4	3.5	5-	4+	4	4+	4+	4	5-	100M	4	4.33
W460	"	67.0	1193	2	88	GPI	46	26.9	3.4	5-	4+	4-	5-	5-	4+	5-	100VL	5	4.44
W465	"	67.5	1202	3	85	GPI	34	26.2	3.6	4+	4+	4+	4	4+	4	5-	80L	5	4.27

CARROT ADAPTATION - PACKAGING - 1982

Cultivar	Source	Mkb. Yield tonnes/ha	Mkb. Yield Bushels/Ac	% Oversize	% Marketable	Types	Stand/meter	Roots Length (cm)	Roots Width (cm)	Uniform. Shape	Uniform. Size	Appearance	Resistance to Greening	Color Interior	Color Exterior	Core Size	% Horizontal Lesions & Degree	Blight	Score
W468	Cro	68.5	1219	15	93	GPI	24	26.4	3.6	4+	4+	4+	4+	4	4	5-	60VL	5	4.27
W586	"	73.5	1308	18	92	GPD	30	25.3	3.6	4-	4	4-	4-	4+	4+	5-	100VL	4	4.06
Harvestmore	"	79.0	1406	30	95	IG	31	25.4	3.7	4+	4+	4+	4	3+	4-	4	100VL	3	3.99
Aristopak	"	65.5	1166	28	90	DGP	30	23.5	3.4	4-	4-	4-	4+	4+	4	5-	100L	5	4.06
Flavorpak	"	91.0	1620	29	88	GPI	38	25.3	3.6	4+	4	3+	4+	4-	4	5-	100VL	5	4.04
Sweet 'n Crisp	"	66.5	1184	31	91	DGP	32	24.8	3.5	4+	4-	4	4	3+	4	4+	100VL	4	3.94
H6	"	72.0	1282	18	86	GP	32	23.5	3.7	4+	4	4+	4-	4	4+	4+	100VL	5	4.13
N-026 *	"	73.5	1308	22	89	GPN	42	19.7	3.2	3+	4-	4	4	3+	4	5-	100VL	5	3.86
H 123	"	90.5	1611	3	88	GP	50	24.6	3.7	4+	4+	4+	4+	5-	4+	5-	100VL	5	4.41
Sp.Classic	"	85.0	1513	16	89	D	42	20.0	3.8	4	3	3+	4	4	4	5-	100L	4	3.86
Thor	Mor	58.0	1032	22	89	DNI	27	21.5	3.7	3	3+	3	4	3-	4-	4+	100M	5	3.43
Pakmor	"	92.0	1638	23	89	DI	37	24.2	3.6	4-	4-	4-	4+	3	3+	4+	80L	5	3.71
Exp. 2019	"	57.5	1024	21	92	GPD	31	22.2	3.5	4	4-	4+	4+	4+	4+	5-	100M	5	4.23
Exp. 2101	"	86.0	1531	31	93	D	29	25.0	3.7	4+	4	4-	4-	4+	4-	4+	100VL	4	4.00
AVX 7901	Sun	74.5	1326	37	90	GP	26	26.4	3.8	4+	4	4+	4	4-	4+	4-	100VL	4	4.04
AV 8159	"	58.5	1041	7	87	I	34	25.4	3.6	5-	4+	4+	5-	5-	4	5-	100VL	2	4.49
AV 8160	"	71.0	1264	8	83	I	42	27.2	3.7	4+	4+	4-	5-	4-	4-	4+	80L	4	4.10
Av 8163	"	46.0	819	20	79	I	30	28.0	3.7	5-	4+	4+	5-	4+	4	4+	100VL	4	4.37
Tamino *	RS	53.0	943	24	89	GPN	23	22.6	3.8	3	4	3	3	4	4-	5-	100L	5	3.63
Clairon *	"	56.5	1006	0	72	N	45	20.6	3.4	4+	4	3	2	4+	4-	4+	100M	4	3.66
Fedora	"	93.0	1655	21	90	DGP	46	21.9	3.8	4-	4	3+	3	4-	4	4-	100M	5	3.63
Adorno	"	77.0	1371	19	93	DGP	32	22.2	3.6	4-	4	3+	3	4+	4-	4-	80L	4	3.67
RS76061 F1 *	"	62.5	1113	5	88	N	35	20.0	3.8	5-	4+	4+	3+	4+	4-	4+	100VL	5	4.13
RS77592 F1 *	"	60.0	1068	20	72	N	35	19.8	3.6	4+	4+	4	4-	4	4+	4	100VL	4	4.09
El Presidente	Des	55.5	988	4	87	DGP	34	21.8	3.5	4-	4	3	3+	4+	4+	5-	80L	4	3.90
Nantes Fancy *	OhE	65.5	1166	0	83	N	44	19.1	3.7	4+	4	4+	3	4-	3	5-	80VL	4	3.86

CARROT ADAPTATION - PACKAGING - 1982

Cultivar	Source	Mkb.Yield tonnes/ha	Mkb.Yield Bushels/Ac	% Oversize	% Marketable	Types	Stand/meter	Roots Length (cm)	Roots Width (cm)	Uniform. Shape	Uniform. Size	Appearance	Resistance to Greening	Color Interior	Color Exterior	Core Size	% Horizontal Lesions & Degree	Blight	Score
W161	PES	60.5	1077	12	78	GPN	39	23.4	3.5	3+	4-	4-	3+	3+	4	4+	100L	4	3.66
Exp.192	"	77.0	1371	13	94	GPD	43	23.8	3.5	4+	4	3+	4+	3+	4-	4	80M	4	3.84
W387	"	80.5	1433	13	86	D	38	24.8	3.8	4+	4	4-	4+	4	4-	4-	100VL	5	3.96
Flavor Pak	"	75.5	1344	15	96	GPD	33	23.9	3.7	3+	4	4-	4-	3+	4-	4+	80VL	4	3.71
Sweet 'n Crisp	"	68.5	1219	19	88	DG	36	24.5	3.5	4-	4-	3+	3+	4	4-	5-	60VL	4	3.77
Harvestmore	"	74.5	1326	13	94	DGP	34	23.7	3.6	4-	4-	3+	3+	3+	4-	4	40L	3	3.57
Aristopak	"	59.0	1050	6	83	GPI	36	25.3	3.7	4-	4	4-	4+	3+	4-	4	100M	3	3.81
Waltham Hicolor	"	41.0	730	7	61	DGP	30	21.7	3.6	4-	4-	4-	4-	4-	4-	4+	100VH	4	3.79
Orlando Gold	"	56.0	997	0	78	GP	40	23.8	3.4	4+	4	4-	4+	4+	4	5-	80VI	4	4.19
6N7C	Har	51.0	908	2	75	GPD	33	24.3	3.6	4	4	4+	4-	4	4	5-	100M	1	4.10
6N11C	"	64.0	1139	3	88	IG	39	24.9	3.4	4+	4+	4+	4	4+	4+	5-	100VL	2	4.31
6N17C	"	72.5	1291	16	85	GPD	30	22.5	3.8	4-	3+	3	3+	3+	4-	4	60VL	3	3.47
6NL7C	"	72.5	1291	17	89	GPI	33	24.8	3.8	4	4+	4	4+	4-	4-	4+	100L	4	4.04
6NL11C	"	71.0	1264	16	91	DGP	34	25.0	3.5	4-	4	4-	4-	4-	4+	4+	100VL	4	3.91
6K11C	"	67.0	1193	18	95	GPD	26	26.6	3.7	4+	4	4-	4-	4	4+	4	100M	4	4.00
6K17C	"	83.5	1486	27	92	DN	34	23.8	4.0	4-	4	4	3+	3	4-	3+	100VL	4	3.57
6NLC5	"	68.0	1210	14	82	DGP	33	25.0	3.7	4-	4+	4	3+	4+	4	4+	100L	4	3.99
6NLC9	"	74.0	1317	40	91	DGP	30	23.1	3.6	4+	4	4+	4	4-	4	4+	80VL	4	4.09
6KC5	"	78.5	1397	5	85	DGP	40	23.5	3.8	4	4-	4-	3+	4-	4	5-	100VL	5	3.87
6KC8	"	72.0	1282	26	84	GP	34	24.8	3.8	4+	4	4+	4+	4	4+	3+	80VL	5	4.07
6KC9	"	69.5	1237	5	88	GPD	40	24.8	3.7	4-	4	4+	4+	3	4	3	80VL	4	3.76
C76K	"	62.5	1113	10	92	GP	34	24.6	3.6	4+	4+	4+	4-	4-	4+	4+	80VL	4	4.13
756C25	"	76.5	1362	10	87	DGP	53	22.8	3.6	4-	3+	3	4+	4+	4	5-	80L	5	3.90
6KU11	"	63.0	1121	9	75	GP	43	23.6	3.5	4+	4	3+	4	4	4-	4+	60VL	5	3.94
146KU11	"	72.5	1291	0	82	ID	52	24.5	3.4	4+	4+	4+	4+	4	4-	5-	60VL	5	4.23
146K328	"	81.0	1442	16	83	--	42	22.6	3.8	3	3+	3	4+	4-	4	4+	80L	4	3.66

CARROT ADAPTATION - PACKAGING - 1982

Cultivar	Source	Mkb.Yield tonnes/ha	Mkb.Yield Bushels/Ac	% Oversize	% Marketable	Types	Stand/meter	Roots Length (cm)	Roots Width (cm)	Uniformity Shape	Uniformity Size	Appearance	Resistance to Greening	Color Interior	Color Exterior	Core Size	% Horizontal Lesions & Degree	Blight	Score
146KC25	Har	94.5	1682	18	86	DGP	47	23.8	3.5	4-	4-	4-	4-	4+	4	5-	60VL	5	3.97
6K11	"	83.5	1486	7	88	GPD	37	25.3	3.6	4+	4+	4+	4+	4	4-	4+	100VL	5	4.17
Gold Pak-653	Glo	73.5	1308	5	89	GPN	46	23.1	3.6	3+	3+	4-	4-	3+	4-	4	100L	4	3.57
Gold Pak-G Str.	"	51.5	917	0	92	GP	32	22.7	3.5	4+	4	4-	4-	5-	4-	4+	100VL	5	4.06
80A-20	"	51.5	917	12	52	DN	46	22.3	3.7	3+	3+	3+	4	4+	4	4+	80VL	5	3.79
80A-21	"	92.5	1647	32	90	GPD	36	22.5	3.8	3+	4	3+	3+	4+	4	4+	100L	5	3.79
Romosa *	BEJO	96.5	1718	21	86	N	51	20.7	3.7	4+	3+	3+	2	4+	4-	3+	100VH	5	3.46
Nantucket F1*	"	78.0	1388	11	87	N	37	18.0	3.7	5-	4+	4+	2+	5-	4	4+	100L	4	4.09
Flyn F1	"	75.0	1335	48	81		33	20.0	4.0	2+	3	2+	2	4+	4	4-	100M	5	3.09
Narman F1	"	88.0	1566	8	83	DN	58	17.1	3.8	3	2	2+	3+	4	4-	4-	100L	4	3.14
NKX-1400	NK	65.0	1157	29	72	ND	42	15.9	4.0	3+	3	3	3+	4	4	4+	100VL	5	3.56
PSR 181	PETO	77.5	1380	10	83	I	33	28.2	3.8	5-	4+	4+	4+	4+	4	5-	80VL	5	4.37
(3430x3316)3187	PES	33.0	587	29	75	I	14	27.2	3.7	5-	4+	4+	5-	4+	4+	5-	100M	5	4.47
Orlando Gold	"	77.0	1371	13	83	I	36	25.3	3.6	5-	4	4-	4+	4+	4	5-	80L	5	4.24
BC 524	"	77.5	1380	11	84	Igp	40	26.0	3.6	4+	4+	4	4+	5-	4+	5-	60VL	5	4.37
EXP. 105	"	53.5	952	35	91	DN	22	21.9	3.7	3	4-	3+	3+	3	4-	3	100L	5	3.29
Sierra	NK	70.0	1246	32	76	D	25	22.1	3.8	4+	4-	4	4	4+	4-	4+	100L	5	4.04
NKX 1000	"	76.0	1353	12	71	GPD	41	24.6	3.7	4	4+	4-	4	4+	4	4+	100M	4	4.09

* Slicer Types: the degree to which the shape makes it suitable for slicers
** Processing types.

Rusty Root: Very little rusty root was found except on Flacora, Adorno and Gold Pak 653.

Horizontal Lesions: (or 'Cavity spots' or 'black spots') - 80 VL means that 80% of the roots have very few horizontal lesions of a very small size. M = Medium
VH = Very Many, very large spots, roots unmarketable.

Note: Since this disorder affects carrots to a different degree on other (mineral) types of soils, it is not considered when tabulating marketable yields.

SOME CARROT CULTIVARS THAT COULD BE TRIED FOR SLICERS

Cultivar	Source	Mkb.Yld Tonnes/ha	Mkb.Yld Bushels/Acre	% Mkble	Type	Roots Length (cm)	Roots Width (cm)	Uniformity Size & Sh.	Appearance	Resist.to Gr.Shoul.	Color Interior	Color Exterior	Core Size	% Horiz.Lesions & Degree	Blight	Slicer Shape	Score
ADAPTATION - PACKAGING																	
ARZ135 F1	NIPB	92	1638	86	Nd	21	3.9	4.0	4+	4-	5-	4	4+	80VL	5	4	4.14
#4256	Sto	67	1184	81	N	21	3.7	4.3	4+	4-	4-	4	4+	100L	5	4	4.09
N-026	"	74	1308	89	GPN	20	3.2	3.5	4	4	3+	4	5-	100VL	5	4	3.86
RS76061 F1	RS	63	1113	88	N	20	3.8	4.5	4+	3+	4+	4-	4+	100VL	5	5	4.13
RS77592 F1	"	60	1068	72	N	20	3.6	4.3	4	4-	4	4+	4	100VL	4	4	4.09
Tamino	"	53	943	89	GPN	23	3.8	3.5	3	3	4	4-	5-	100L	5	4	3.63
Clairon	"	57	1006	72	N	21	3.4	4.2	3	2	4+	4-	4+	100M	4	4	3.66
Nantucket	BEJO	78	1388	87	N	18	3.7	4.5	4+	2+	5-	4	4+	100L	4	5	4.09
1010 F1	"	67	1193	86	N	18	3.4	4.4	4+	3-	4+	4	4+	100L	5	5	4.04
Romosa	"	97	1718	86	N	21	3.7	3.8	3+	2	4+	4-	3+	100VH*	5	4	3.46
Nantes Fancy	OhE	66	1166	83	N	19	3.7	4.2	4+	3	4-	3	5-	80VL	4	5	3.86
Hytop	S&G	97	1727	83	N	21	4.1	4.3	4+	2	4+	4	4	100L	5	4	3.89
Nanthia	"	91	1611	71	N	20	3.9	4.0	4+	2	4+	4	4+	--	4	5	3.84
Tip Top	"	51	908	90	N	22	4.0	4.5	4+	2	3	4-	3+	100L	5	5	3.61
MAIN - PROCESSING																	
Berl.Berlinda	Asm	80	1424	87	LN	24.3	5.8	4.3	3.0	2.2	4.2	3.9	3.4	78M	4.7	4.3	3.80
Berl.Special	"	65	1157	89	LDN	22.3	5.1	4.0	3.6	3.4	4.1	4.0	4.1	66VL	5.0	3.9	3.90
Berl.Bierma	ARZw	88	1566	96	LN	21.6	5.2	4.4	3.9	2.9	4.5	4.0	3.6	73VL	4.0	3.8	4.07
Sp.Classic	Cro	86	1531	82	LD	21.7	5.5	3.9	3.8	3.7	4.0	4.1	4.1	87VL	4.3	3.7	3.89
All Season Cross	Tak	82	1460	84	LN	20.0	5.8	4.1	3.9	2.5	4.2	4.0	4.2	93M	3.7	3.7	3.91
ADAPTATION - PROCESSING																	
NKX 1401	NK	44	783	89	LN	22.7	4.9	4.3	4.2	3.2	4.2	3.9	4.3	100VL	4.5	4.6	3.99
#2150	Sto	63	1121	78	LN	23.8	5.3	4.3	3.7	2.0	3.9	3.9	4.2	80L	5.0	4.5	3.69
#2151	"	40	712	83	N	19.0	3.5	3.7	4.3	2.4	3.6	4.3	3.8	80H	5.0	4.4	3.57
Exp. 218	PES	68	1210	85	LN	23.8	5.4	4.3	4.0	2.0	3.7	3.7	3.0	100M	5.0	4.5	3.41
Exp. 241	"	51	908	92	N	21.3	4.9	4.3	3.9	3.0	4.1	4.0	3.9	45VL	4.5	4.0	3.87

Note: The above cultivars, taken out of the different variety trials, have the best cylindrical shape (see slicer shape). Also important, are marks given for core size, internal color and resistance to green shoulders. Many of this type of carrot have to be hilled to prevent green shoulders. For explanation of marks, see packaging and processing trials. * Although 100VH renders all roots unmarketable, this might not be the case on other (mineral) soil, and for this reason, the % unmarketable was not adjusted.

CARROT CULTIVAR TRIALS - 1982 - PROCESSING TYPES

The Main Trial is listed in order of color.

The great majority of culls consisted of split roots except in cvs Berlicum Berlinda and (872x6000)9541, which had more forked roots

5 = most desirable 1 = least desirable

* Cultivars that have a more or less cylindrical shape, required for slicing, with Berlicum Berlinda receiving the highest score (4.3).

** Spartan Bonus regular had 6% seeders and (872x6000)9541 had 7% seeders

*** Heavily affected by Rusty Root

Types of roots: D = Danvers; C. or Ch = Chantenay; N = Nantes; Sp. = Spartan; Berl. = Berlicum; L = Long

Crown Shape = a hollow crown receives a lower mark Score: = The average of the 10 preceding marks

Horizontal Lesions: Also called cavity spots - 73VL means that 73% of the roots have Horiz.Lesions or cavities of very small size and very few in number.
VH = many very large lesions, roots unmarketable
M = lesions of medium size and number

Rusty Root (R.R.):= most cvs have good tolerance to Rusty Root when plants are properly spaced. See also ***

Management Procedures:

Fertilizer 500 kg/ha 10-4-8 + 15 kg/ha Borax

Seeded May 14 with a 5 cm scatter shoe. Rows at 50 cm at 42 seeds per meter. Plants thinned to approx. 35/m.

The main trial was replicated three times; the adaptation trial two times.

After Sept.1, no fungicides were applied; to find differences in tolerance to leaf blights.

Harvest took place on Oct. 28 and data was taken in early December.

Listed in Order of Color

CARROT MAIN CULTIVAR TRIAL - 1982 - PROCESSING TYPES

Cultivar	Source	Mkb.Yld. Tonnes/ha	Mkb.Yld. Tons/Acre	% Mkble	Mkble Wt. /root (g)	Type of Root	Roots Length (cm)	Roots Width (cm)	Uniformity of Shape & Size	Smooth	Crown Shape	Core Size	Gr.Shoulder	Color Exterior	Color Cortex	Color Camb Zone	Color Core	Color Uniformity	Score	Horiz.Lesions & Degree	Blight	Length of Tops
Berl.Bierma*	ARZw	88	39	96	231	LN	22	5.2	4.4	3.9	3.3	3.6	2.9	4.0	4.8	4.7	4.7	4.4	4.07	73VL	4.0	38
Dess-Dan	Sto	70	31	81	303	LD	22	5.7	4.4	4.3	3.7	4.3	4.0	4.3	4.3	4.6	4.4	4.2	4.25	87VL	4.3	47
King Midas	FM	64	28	98	220	DN	17	5.9	3.6	3.5	2.7	4.3	2.7	4.3	4.4	4.7	4.5	4.3	3.90	96L	5.0	52
Sp.Bonus 80	Asg	77	34	94	294	LD	20	6.1	4.1	3.7	3.3	4.2	3.6	4.0	4.6	4.3	4.3	4.3	4.04	53VL	4.7	49
Can Pak	Des	65	29	88	255	LD	23	5.9	4.1	4.0	3.1	4.2	3.5	4.2	4.3	4.3	4.6	4.2	4.05	80VL	4.7	43
Triple Gold	Jung	45	20	75	227	D	18	5.5	3.5	4.1	3.2	4.7	3.6	4.2	4.1	4.4	4.6	4.2	4.06	73VL	4.0	35
XPH869 Casey	Asg	60	27	91	241	LD	21	5.7	4.2	4.0	3.2	4.4	3.9	4.0	4.4	4.3	4.2	4.1	4.07	60L	4.7	47
Tahoe	NK	75	33	92	257	LD	20	5.9	4.2	4.0	3.1	4.3	3.8	4.0	4.0	4.4	4.3	4.2	4.03	73VL	4.0	34
Sp.Bonus**	Asg	68	30	94	273	LD	20	6.0	4.0	3.8	3.3	4.4	3.6	4.1	4.3	4.6	4.0	4.1	4.02	92L	5.0	56
AllSeason Cross *	Tak	82	36	84	282	LN	20	5.8	4.1	3.9	3.2	4.2	2.5	4.0	4.2	4.1	4.7	4.2	3.91	93M	3.7	32
Danvers 126	Asg	81	36	94	260	D	19	6.4	4.0	3.2	2.9	3.8	3.1	4.1	4.1	4.7	4.3	4.2	3.84	53L	4.3	59
Royal Danvers	Agw	65	29	74	381	LD	24	6.1	4.1	3.4	3.5	4.1	3.2	3.8	3.9	4.6	4.3	4.2	3.91	73L	3.7	58
Berl.Berlinda*	Asm	80	35	87	361	LN	24	5.8	4.3	3.0	3.9	3.4	2.2	3.9	4.3	4.4	4.4	4.2	3.80	78M	4.7	43
Midas Touch	FM	51	23	71	388	D	20	6.7	3.9	3.6	3.2	4.9	2.8	4.1	4.4	4.3	4.0	4.1	3.93	66M	4.7	42
Rd.Core Ch.503	Asg	78	35	94	270	C	15	6.7	4.0	4.2	3.0	3.4	3.0	4.0	4.1	4.3	4.2	3.9	3.81	73L	4.3	52
Berl.Spec.*	Asm	65	29	89	204	LDN	22	5.1	4.0	3.6	3.6	4.1	3.4	4.0	3.9	4.3	4.0	4.1	3.90	66VL	5.0	54
Sp.Classic*	Cro	86	38	82	245	LD	22	5.5	3.9	3.8	3.5	4.1	3.7	4.1	3.8	4.0	4.0	4.0	3.89	87VL	4.3	43
Sp.Winner	Sto	65	29	83	340	LD	23	5.6	3.9	4.0	3.5	4.6	3.2	4.1	4.0	3.9	4.0	4.1	3.93	64L	3.7	38
Ch.Red Cored	Asm	72	32	86	257	C	15	6.8	4.1	4.2	3.0	3.8	2.9	4.1	3.7	4.2	4.1	4.1	3.82	96L	3.7	50
(872x6000)9541 **	MSU	46	21	95	289	LD	21	5.9	3.9	3.4	3.5	3.9	3.8	4.2	4.1	4.0	4.0	3.8	3.86	60VL	4.7	45
Royal Cross***	Tak	43	19	54	228	CD	16	6.0	2.5	2.8	3.2	3.4	3.0	3.8	3.2	3.8	2.7	2.9	3.13	92H	3.7	54

Most of the culls were splits.

See Notes on Page 19.

LONG TERM AVERAGE OF CARROT CULTIVARS - PROCESSING TYPES

Cultivar	Source	# Years Tested	LTA Yield t/ha	LTA Yield T/A	LTA Color	LTA Score
Tahoe	NK	2	69.0	30.8	4.23	4.06
Sp.Bonus 80	Cro	3	69.0	30.8	4.23	4.03
Berlicum Bierma	ARZ	3	64.0	28.7	4.23	3.84
Casey (XPH869)	Asg	2	65.0	29.0	4.15	4.05
Dess-Dan	Des	7	76.6	34.2	4.15	4.01
Spartan Bonus	Cro	9	76.0	33.9	4.09	3.94
Spartan Delux	"	6	69.0	30.8	4.00	3.92
Spartan Winner	"	8	65.0	29.0	3.98	3.89
King Midas	FM	5	62.1	27.7	3.96	3.84
All Season Cross	Tak	4	76.0	34.2	3.95	3.84
Midas Touch	FM	5	60.4	26.9	3.94	3.92
Can -Pak	Des	6	66.3	29.6	3.90	3.81
Spartan Classic	Cro	9	78.7	35.1	3.88	3.86
Royal Danvers	Agw	3	71.0	31.7	3.87	3.84
Berlicum Berlinda	Asm	3	72.0	32.1	3.84	3.62
Spartan Premium	Cro	7	70.6	31.5	3.83	3.79
Oranza	BEJO	3	74.0	33.0	3.82	3.66
Danvers 126	Asg	9	63.2	28.2	3.78	3.66
Gold King	NK	4	71.0	31.6	3.71	3.56
Red Core Chantenay	Asg	8	71.9	32.1	3.65	3.55

Listed in order of color
LTA = Long Term Average of some of the carrot processing cultivars tested in our trials.

CARROT CULTIVAR - ADAPTATION TRIAL - 1982 - PROCESSING TYPES

Cultivar	Source	t/ha	% Mkble	Mkble wt/root	Type	Roots: Length	Roots: Width	Uniformity	Smooth	Crown Shape	Core Size	Gr.Shoulder	Color: Exterior	Color: Cortex	Color: Camb Zone	Color: Core	Color: Uniformity	Score	Horiz.Lesions & Degree
W39	Cro	71	89	324	DN	20	6.3	3.7	4.0	2.3	4.0	3.4	4.0	3.9	4.3	4.0	3.9	3.75	83M
W41	"	55	84	303	LD	24	6.1	4.3	3.9	3.7	3.7	3.9	3.7	3.2	3.9	3.0	3.2	3.65	60L
W44	"	57	83	300	DN	21	6.3	4.0	4.2	2.9	3.3	3.4	3.9	4.0	4.3	4.0	4.0	3.80	70VL
W186	"	29	85	219	DN	22	4.7	3.7	4.2	3.7	4.2	3.9	4.0	3.7	4.0	3.9	3.7	3.90	95L
W499	"	56	83	280	DN	20	5.8	4.3	3.9	2.9	4.0	2.5	3.9	3.4	4.2	3.8	3.7	3.66	90VL
W509	"	85	92	273	LD	24	5.5	3.7	3.5	2.9	4.0	3.9	4.2	3.9	4.3	4.0	4.2	3.86	70VL
(3475x4367)F524	USDA	19	60	308	ID	26	5.3	4.2	3.9	3.4	3.9	4.7	4.2	3.5	4.3	3.3	3.5	3.89	70VL
[(3640x3316)3640]xF524	"	43	91	250	I	27	4.7	4.0	3.9	4.0	4.5	4.2	4.3	4.3	4.3	4.2	4.0	4.17	90VL
(6373x6345)9695	"	63	75	301	ND	20	6.1	4.0	4.2	3.0	4.0	3.4	3.9	3.5	4.3	4.0	3.9	3.82	95L
XPH 875	Asg	67	87	258	LD	24	5.7	3.7	4.0	3.2	4.0	3.4	4.0	4.0	4.3	4.0	3.9	3.85	85L
XPH 984	"	60	87	316	LD	22	6.2	4.0	3.5	3.2	4.2	2.7	3.9	4.0	4.3	4.2	4.0	3.80	75L
XPH 985	"	90	96	301	DI	23	6.1	3.8	3.9	3.0	3.4	3.5	4.2	3.7	4.2	3.7	3.8	3.72	80VL
XPH 986	"	62	82	326	LD	23	6.0	4.2	3.9	3.2	4.2	3.8	4.0	3.9	4.0	3.7	3.9	3.88	90VL
#2150 *	Sto	63	78	329	LN	24	5.3	4.3	3.7	3.0	4.2	2.0	3.9	3.7	4.3	3.9	3.9	3.69	80L
#2151 *	"	40	83	224	N	19	3.5	3.7	4.3	3.7	3.8	2.4	4.3	3.4	3.7	3.0	3.4	3.57	80H
#2152	"	66	89	274	D	23	5.8	3.9	3.4	3.2	3.4	3.5	3.7	3.7	4.2	4.2	3.8	3.70	90VL
Exp. 192	PES	55	82	248	DI	29	5.2	3.3	2.9	4.0	3.0	4.3	4.0	3.2	4.2	3.2	3.2	3.53	100M
Exp. 218 *	"	68	85	281	LN	24	5.4	4.3	4.0	2.5	3.0	2.0	3.7	3.2	3.9	4.0	3.5	3.41	100M
Danvers 126	"	64	85	353	D	21	6.4	4.0	3.0	3.0	3.7	3.7	4.0	4.0	4.0	3.7	3.7	3.68	100M
Royal Chantenay	"	92	91	305	LC	17	6.5	4.3	4.3	3.0	3.0	2.7	3.7	3.3	4.3	3.3	3.3	3.52	80L
Exp.241 *	"	51	92	232	N	21	4.9	4.3	3.9	3.2	3.9	3.0	4.0	4.0	4.2	4.2	4.0	3.87	45VL
Exp. 1242	"	40	82	232	DI	29	4.9	3.9	3.9	3.8	4.3	4.3	3.8	3.4	3.8	3.5	3.5	3.82	75L
FM-X105	FM	91	92	284	DN	18	6.5	4.2	4.2	2.9	4.2	2.5	3.7	3.8	4.2	4.2	4.0	3.79	80VL
FM-X106	"	81	89	279	DN	20	6.4	4.0	3.7	3.0	3.9	3.2	3.7	3.7	4.0	3.7	3.7	3.66	77M

CARROT CULTIVAR - ADAPTATION TRIAL - 1982 - PROCESSING TYPES

Cultivar	Source	t/ha	% Mkble	Mkble wt/root	Type	Roots: Length	Roots: Width	Uniformity	Smooth	Crown Shape	Core Size	Gr. Shoulder	Color: Exterior	Color: Cortex	Color: Camb Zone	Core	Uniformity	Score	Horiz. Lesions & Degree
XP 332	Agw	66	76	275	D	22	5.7	3.9	3.7	3.5	3.5	3.7	3.9	3.7	3.8	4.0	3.9	3.76	80VL
XP 335	"	59	83	280	LD	24	5.8	3.5	3.7	3.2	3.7	3.5	4.2	4.0	4.3	4.3	3.9	3.83	70VL
XP 336	"	52	77	306	D	21	6.6	4.0	3.9	3.3	3.2	2.7	4.0	3.7	4.0	3.7	3.5	3.60	100L
Kinko Cross 8" W123	Sak	70	77	318	DN	19	6.3	4.0	4.0	3.2	3.3	3.9	3.9	3.5	4.2	3.0	3.5	3.65	100L
Kinko Cross 8" W140	"	59	82	308	D	20	6.6	3.7	3.9	2.9	3.9	3.2	3.7	3.0	3.9	3.2	3.5	3.49	80VL
NKX 1401 *	NK	44	89	220	LN	23	4.9	4.3	4.2	3.0	4.3	3.2	3.9	4.0	4.3	4.5	4.2	3.99	100VL
Tahoe	"	66	87	252	DN	19	6.1	4.3	4.0	3.0	4.0	3.0	4.0	3.7	4.3	4.3	3.7	3.83	80VL
Bonanza	"	64	97	278	LD	28	5.1	4.3	4.0	3.3	4.0	3.7	4.3	3.3	4.3	3.7	3.7	3.86	100VL

Notes:

* Cultivars that have a more or less cylindrical shape required for slicer types.

The majority of the culls were split and some forking was observed. Very little leaf blight occurred.

Cultivars with exceptionally good external and internal color were:

[(3640x3316)3640]xF524	USDA
NKX 1401	N.K.
XP 335	Agw
W 509	Cro
XPH 984	Asg
Exp. 241	PES

EARLY HEAD LETTUCE CULTIVAR TRIAL - 1982

Cultivar	Source	Days to Harvest	Wt/Carton (18 heads) (kg)	% Mkble	Reason Non-Mkble	Diameter (cm)	% Tipburn	Bottom Rot	Firmness	Internal Stem length	Acceptability	Remarks
MAIN - Seeded May 12, 1982. Replicated 3 times.												
Ithaca	Sto	72	16.8	93	Bot.Rot	14.5	0	3.9	3.8	4.3	4.0	
Montello	"	71	15.9	93	" "	15.0	0	3.3	4.0	4.0	4.0	
Montello	Har	72	16.6	90	" "	14.3	0	3.1	4.4	4.0	3.9	
Ithaca	"	73	16.2	93	Bot.Rot.Slime	15.2	0	3.9	3.8	3.9	3.9	
Green Lakes	"	71	15.4	100	--	15.1	0	3.3	4.2	4.1	4.3	
Ithaca	FM	72	16.3	100	--	14.9	0	3.8	3.8	4.1	3.9	
Montello	"	71	14.7	93	Bot.Rot	15.3	0	3.4	4.2	3.9	4.2	
Montello	Asg	71	16.1	97	" "	14.6	0	3.7	4.2	4.0	4.5	
Mesa 659	"	72	15.9	97	Brown Rib	14.5	25	4.2	3.7	4.1	3.8	1 Brown rib, ribby
Ithaca	"	71	14.7	96	Bot.Rot. Undersize	13.8	0	3.7	3.6	4.2	3.8	
Fairton	"	75	14.1	93	Bot.Rot.Slime	14.6	7	3.1	4.0	4.3	4.0	Brown ribs
Green Lakes	Glo	71	15.5	93	Bot.Rot	15.1	0	3.5	4.0	4.1	4.1	Brown ribs
Montello	"	69	14.9	93	--	14.7	0	4.0	3.9	4.2	3.9	
4244 (Elfin Lake)	Sun	69	14.9	100	--	13.7	0	4.2	4.0	3.8	3.9	Oval, nice shape
Miscellaneous - Non-replicated												
Hamlet	Sto	63	4.3	100	--	9.2	0	4+	4	4	4	Butterhead type
Tania	Har	65	6.7	100	--	11.4	20	5	5	4+	4	Very nice, some tipburn
Buttercrunch	"	65	7.7	100	--	12.0	0	4+	4+	4-	3+	Some external tipburn
Deep Red	"	63	6.3	100	--	10.8	0	4	4-	4-	4+	Red leaf lettuce

NOTES:
Rows at 43 cm and thinned to 30 cm. 5=most desirable
On June 22nd, 4 weeks before harvest, a severe hailstorm lasting 20 minutes dropped 22 mm rain and hail stones covering the field with a sheet of ice and all but ruining the lettuce. The result was 20% reduction in size and weight.

LATE HEAD LETTUCE CULTIVAR TRIAL - 1982

Cultivar	Source	Days to Harvest	Wt/Carton (18 heads) (kg)	% Mkble	Reason Non-Mkble	Diameter (cm)	% Tipburn	Bottom Rot	Firmness	Uniformity	Internal St.Lgth	Acceptability	Remarks
MAIN - Seeded June 30,1982. Replicated 3 times													
Fairton	Asg	67	18.9	93	Bot. Rot.	15.4	0	4.1	4.1	3.9	4.3	4.2	
Ithaca	"	64	18.9	97	" "	16.3	0	3.9	3.9	4.0	4.0	4.0	Some brown rib
Mesa 659	"	66	23.8	95	Slime	17.1	0	4.3	4.0	4.1	4.2	4.2	Beautiful
Montello	"	65	16.4	87	Bot. Rot	15.7	0	3.7	4.3	4.1	3.9	4.3	
Montello	Glo	65	18.5	83	" "	15.1	0	3.0	4.3	4.3	3.9	4.4	Nice except for bot.rot
Green Lakes	"	66	17.4	80	Bot. Rot, Aster Yellows	16.1	0	3.3	3.8	3.9	4.0	3.9	
Montello	FM	65	17.2	90	Bot. Rot	15.9	0	3.7	4.2	4.2	3.9	4.4	
Ithaca	"	67	20.5	97	" "	16.9	0	4.2	3.7	3.9	3.9	3.8	
Green Lakes	Har	66	17.9	80	Bot.Rot.Stem Rot	16.9	0	3.4	4.2	4.0	4.0	4.1	
Ithaca	"	65	19.9	97	- - -	17.0	0	4.1	3.6	3.9	3.9	3.7	
Montello	"	65	17.0	80	Bot. Rot	15.7	0	3.4	4.4	4.1	3.9	4.0	
Montello	Sto	66	19.7	87	" "	15.9	0	3.4	4.3	4.3	4.2	4.3	
Ithaca	"	66	22.1	87	" "	17.6	0	4.1	3.9	4.3	4.0	4.0	
4244 (Elfin Lake)	Sun	68	15.6	95	" "	14.5	0	3.8	3.9	3.4	3.6	3.9	
Miscellaneous - Non-replicated													
Hamlet	Sto	48	3.2	100	- - -	17.6	0	5	---	---	---	---	Light green Boston
Tania	Har	59	7.1	100	- - -	13.0	40	4	4-	4-	3+	4	
Buttercrunch	"	48	4.1	100	- - -	--	--	5	--	--	--	4+	
Deep Red	"	48	2.6	100	- - -	--	--	5	--	--	--	4+	

Seeded: May 21,1982

EARLY HEAD LETTUCE ADAPTATION TRIAL - 1982

Cultivar	Source	Days to Harvest	Wt/Carton (18 heads) (kg)	% Mkble	Reason Non-Mkble	Diameter (cm)	% Tipburn	Bottom Rot	Firmness	Internal Stem length	Acceptability	Remarks
Great Lakes	Asg	72	16.9	100	--	16.2	40	4+	4	4	4-	Brown Rib
XP989(PC80182)	"	72	14.9	100	--	14.0	0	4-	4-	4+	4-	
XP991(PC813058)	"	72	14.9	100	--	14.9	0	4	4-	4+	4-	
XP992(PC80190)	"	77	14.5	80	--	13.6	20	3	4+	4	4	
XP993(PC80191)	"	72	14.7	100	--	14.8	0	4	4	4+	4	
Marmer	Bru	63	6.9	100	--	11.1	0	4	3+	2	2	Very small
Empress	FM	72	14.8	100	--	14.4	0	4+	3	4+	3+	
Great Lakes 6238	"	74	15.7	100	--	15.6	0	4	3	3+	3+	
Great Lakes 659	Her	75	17.5	70	Slime	15.2	50	4+	3	4	3	
OE 2879	OhE	79	14.6	100	--	17.2	100	4	2	3	2+	
Moxy	Mor	72	18.7	100	--	17.0	20	4+	3	4-	4	Very large,might blow
Salinas R-100	"	75	18.3	100	--	17.2	0	4+	3	3	3+	Slightly ribby
El Toro	"	72	23.0	100	--	18.0	0	4	3-	3	3+	Very nice,not firm
8785	S&G	75	13.1	70	Bot.Rot,Slime	16.0	0	3	4-	3	3+	Orangey spots in stems
L 9752	"	72	21.6	100	--	17.6	50	4	4	2+	3+	V.lge t.burn,lge core
8785	Sto	68	12.7	100	--	14.8	0	4	4-	4	3+	Nice but small
L 9752	"	72	23.2	90	Bot.Rot	16.6	20	4-	4+	3-	4-	Large type
Minilake	"	68	14.6	100	--	13.4	0	4-	4-	4-	3+	
Rocky	"	78	20.7	10	Slime	18.0	100	3	3+	4	1	
Vangard Surehead	"	78	16.5	90	Slime	16.8	40	4	3+	4-	4-	Some brown rib
Lake Powell	Asm	75	17.6	100	--	16.6	0	4-	4-	4	4-	
Lake Nyah	"	78	30.6	10	Slime	17.0	100	3+	3-	4-	1	
King Crown	Sak	75	19.3	70	Bot.Rot	16.6	100	3+	4-	4-	3+	
Queen Crown	"	72	16.2	40	Slime	15.5	0	3	4	4	2-	

See Notes: Head Lettuce.

Seeded: June 30,1982

LATE HEAD LETTUCE ADAPTATION TRIAL - 1982

Cultivar	Source	Days to Harvest	Wt/Carton (18 heads) (kg)	% Mkble	Reason Non-Mkble	Diameter (cm)	% Tipburn	Bottom Rot	Firmness	Uniformity	Internal Stem length	Acceptability	Remarks
Great Lakes	Asg	70	18.8	90	Bot.Rot	15.4	0	4+	4	4	4+	4	Small heads, some br.rib
XP989(PC80182)	"	70	21.4	90	" "	19.4	0	4+	4+	4	4-	4	Beautiful head
XP991(PC813058)	"	66	18.4	100	---	18.0	0	4+	3+	4+	4	4	
XP992(PC80190)	"	66	17.0	100	---	16.0	0	4-	4	4	4+	4	
XP993(PC80191)	"	64	17.0	100	---	15.4	0	3+	4+	4	4+	4	Firm but small
Marmer	Bru	Gone to seed prematurely											
Empress	FM	70	15.2	80	Bot.Rot	15.0	0	3	4	4-	4+	4	
Great Lakes 6238	"	73	21.6	80	Slime	15.6	25	4+	3+	3	3	2	
Great Lakes 659	Her	73	25.2	100	---	17.6	20	4+	4-	4-	4-	3+	
OE 2879	OhE	76	17.3	80	Small & slime	15.4	--	4+	2	4-	2-	2+	
Moxy	Mor	70	24.6	60	Slime	18.6	--	3+	4-	4-	3+	4-	
Salinas R-100	"	70	14.9	100	---	15.2	--	5-	3	4	2+	3	
El Toro	"	66	21.3	100	---	16.6	0	5-	3+	4	3	4-	
8785	S&G	66	16.6	100	---	15.6	0	4+	4	3	4-	4-	Brown spots on stems
L 9752	"	70	22.1	100	---	15.0	0	4+	3	3	2	3	
8785	Sto	70	16.6	100	---	15.0	0	3+	3+	3	3	3+	
L 9752	"	70	22.5	100	---	17.6	0	4+	4-	4-	2+	3	
Minilake	"	64	14.5	80	Bot.Rot	14.6	0	3+	3+	3+	3+	3+	
Rocky	"	73	Not suitable for harvest. All puffballs going to seed										
Vangard Surehead	"	73	17.6	70	Bot.Rot	16.4	0	4-	2	4	3	2	Does not mature
Lake Powell	Asm	70	21.9	80	1 slime, 1 soft	16.2	0	4+	3+	4-	3	3+	
Lake Nyah	"	70	21.1	50	Slime,Bot.Rot	19.4	0	3	2	3-	3+	3	Poor uniformity
King Crown	Sak	73	23.0	90	Slime	18.0	0	4+	3+	4	3	3	
Queen Crown	"	62	15.6	90	Tipburn	15.6	80	4+	4-	4+	4-	4	

EARLY ROMAINE CULTIVAR TRIAL - 1982

Cultivar	Source	Days to Harvest	Wt/Carton (18 heads)	% Mkble	Diameter (cm)	% Tipburn	Bottom Rot	Firmness	Uniformity	Internal Stem lgth	Acceptability	Remarks
MAIN - Seeded May 26, 1982, Replicated 3 times.												
Parris Island	Har	69	17.4	100	15.3	13	4.4	4.0	4.2	4-	4.3	Very nice
Parris Island	Her	69	16.5	100	15.2	23	4.7	4.3	4.2	3+	4.1	Nice except t.burn
Signal	Sto	69	17.1	100	14.9	35	4.2	3.9	3.8	4	3.8	
Parris Island	Asg	69	16.7	100	15.3	30	4.4	3.8	4.0	4	3.7	
Roli	DP	65	16.3	77	15.3	87	4.6	3.9	4.2	3+	3.7	
Valmaine	Har	69	16.7	97	15.2	55	4.1	3.9	4.3	4-	3.6	
Bacarolle	S&G	66	14.5	93	14.6	53	4.3	3.5	3.7	3-	3.4	
Cartan	DP	69	14.0	100	14.6	43	4.1	3.4	3.9	4+	3.3	
Valmaine	Sto	69	16.0	97	15.1	55	3.9	3.7	3.1	3	3.2	
Valmaine	Asg	69	16.0	100	15.3	80	3.9	3.6	3.7	4-	2.9	
ADAPTATION - Non-Replicated												
Signal	Asg	69	15.6	100	14.8	10	4+	3	4	3-	3	V.short,not compact
XP 825	"	69	17.7	100	15.2	0	5-	4+	4+	3-	3+	100% Brown rib
XP 930	"	69	16.6	100	14.8	0	5-	4+	5-	4	5-	Excellent
XP 996	"	69	18.2	100	16.8	10	5-	4+	4	3-	4+	Nice
XP 997	"	69	18.5	100	15.8	10	5-	4+	4	2+	4-	
XP 998	"	69	18.4	100	14.4	10	5-	4	4	3+	4+	
XP 999	"	69	17.4	100	16.2	5	5-	4+	4+	2	4+	
Signal	Mor	65	18.1	100	15.8	40	5	4+	4+	4+	4+	Short,some t.burn
Romance	S&G.	69	17.1	100	15.4	0	5-	4	4+	2	4+	Short,excellent
Cos 322	Sto	69	14.0	100	14.4	0	5	4	5-	3+	4+	Excellent,light weight
Lot #9197	"	69	15.1	100	14.8	5	5-	4-	4	4+	4	Good

See Notes - Head Lettuce

LATE ROMAINE CULTIVAR TRIAL - 1982

Cultivar	Source	Days to Harvest	Wt/Carton (18 heads) (kg)	% Mkble	Diameter (cm)	% Tipburn	Bottom Rot	Firmness	Uniformity	Internal Stem length	Acceptability	Remarks
MAIN - Seeded July 8, 1982. Replicated 3 times												
Valmaine	Asg	74	15.7	100	15.5	1.7	4.8	3.7	3.8	10.0	3.6	
Parris Island	"	73	17.1	100	15.0	3.3	4.9	3.9	3.8	10.1	3.9	Going to seed
Cartan	DP	75	15.5	100	15.5	8.3	4.8	3.9	4.0	8.0	3.8	Some tipburn
Roli	"	72	15.3	97	15.8	3.3	5.0	3.8	3.8	9.3	3.7	
Parris Island	Har	72	16.5	100	15.7	0	5.0	3.9	4.0	8.2	4.2	Very good
Valmaine	"	74	14.5	100	15.6	3.3	4.7	3.9	3.9	8.7	4.0	Short
Parris Island	Her	71	16.8	100	15.6	0	5.0	4.2	4.1	8.7	4.3	Good
Bacarolle	S&G	71	16.5	95	14.9	45.0	5.0	3.9	4.0	9.9	3.4	Tipburn
Valmaine	Sto	75	16.1	100	16.8	0	4.9	4.1	4.3	8.3	4.1	Short
Signal	"	72	16.3	100	15.2	0	5.0	4.2	4.1	9.3	4.2	Very good
ADAPTATION - Non-replicated												
Signal	Asg	71	15.6	90	15.2	40.0	5	4-	4-	8.0	4-	
XP 825	"	71	19.4	100	16.4	0	5	4+	4	10.0	4+	Excellent
XP 930	"	71	16.6	100	15.0	0	5	4	4	7.0	4	
XP 996	"	74	12.4	100	15.8	0	5	4+	4+	8.4	4+	Bulky
XP 997	"	74	15.5	100	15.4	0	5	4	4+	10.0	4+	
XP 998	"	74	14.2	100	15.0	0	5	3+	4-	8.0	4	Harvested early
XP 999	"	74	14.9	100	15.4	0	5	4-	4+	9.0	4	
Signal	Mor	71	15.0	90	16.0	40.0	5	3+	3+	6.0	3+	Too much tipburn
Romance	S&G	71	13.1	100	14.0	20.0	5	4	4+	9.0	4	Short, light
Cos 322	Sto	71	13.4	80	14.4	60.0	5	4	4	6.0	3	Too much tipburn
Lot #9197	"	76	17.6	100	15.8	0	5-	4	4-	8.0	4	

CELERY CULTIVAR BOLTING TRIAL - 1982

Cultivar	Source	Mkb.Wt. t/ha	% Trim Loss	Petiole Length	Total Length	Rib-bing	Crisp-ness	Stringy	Compact-ness	Boron Defic	Score	% Seeders
Green Giant	Tak	176	32	29	68	MR	4.0	4.0	3.0	4.7	3.78	63
Fla 683	Asg	172	22	30	70	MR	4.0	4.0	3.2	4.9	3.83	100
FM-1213	FM	167	20	36	71	R	4.0	3.9	3.5	5.0	4.05	8
Tall Utah 5270R Imp.	"	164	25	33	69	R	4.0	4.0	4.2	5.0	4.15	47
Tendercrisp	"	159	21	36	70	S	4.0	3.4	3.4	4.2	3.67	2
Florida 683	Sto	158	22	26	65	R	3.9	3.2	3.7	4.2	3.68	67
Multipak	Asm	155	24	25	60	S	3.9	3.4	2.0	5.0	3.37	33
Tendercrisp	Sto	152	21	32	65	S	4.0	3.9	3.0	4.4	3.75	7
Tall Utah 52-70 (Strain 213)	"	150	24	28	66	MR	4.2	3.9	3.9	3.7	3.88	40
Impr.Utah 52-70	"	150	26	33	66	R	3.7	3.3	4.0	3.7	3.70	50
Bishop	Mor	148	24	34	67	MS	4.2	3.9	3.7	4.4	3.87	3
Summit	FM	147	15	30	64	S	3.9	2.5	3.2	2.9	3.57	2
Deacon	Mor	145	23	28	66	R	4.3	3.9	3.7	4.5	3.93	47
Surepak	Sto	144	31	40	79	R	4.5	4.2	4.5	3.4	4.12	2
68-37	MSU	144	33	32	66	M	4.0	3.9	2.7	2.7	3.33	0
Fla 213	A&C	142	28	33	66	MR	4.2	4.2	4.0	3.9	4.28	52
77-44	MSU	142	31	31	70	MR	4.0	3.9	2.7	4.7	3.82	3
71-28-B	"	142	24	34	69	R	4.0	3.0	4.5	4.4	3.78	60
52-70R	Glo	140	28	35	67	MR	4.0	4.0	4.2	4.7	4.20	45
Summer Pascal	Her	139	26	31	66	R	3.9	3.5	4.0	4.9	3.95	63
79-57	MSU	133	25	35	69	M	4.0	3.5	3.5	4.0	3.82	1
CRY 003	Mor	133	24	27	66	R	4.0	3.7	3.4	4.2	3.75	42
74-100	MSU	132	28	32	67	MS	4.2	3.5	4.0	3.5	3.85	0
373 Clean Cut	Har	132	27	31	68	R	4.0	3.7	4.2	3.3	3.68	42
79-59	MSU	129	36	31	69	M	4.0	3.9	3.2	5.0	4.05	0
79-56	"	128	35	30	68	MR	4.0	3.2	3.5	4.5	3.77	0
79-55	"	127	40	31	69	MS	3.9	2.8	3.5	5.0	3.92	0

CELERY CULTIVAR BOLTING TRIAL - Continued

Cultivar	Source	Mkb.Wt. t/ha	% Trim loss	Petiole Length (cm)	Total Length (cm)	Rib-bing	Crisp-ness	Stringy	Compact-ness	Boron Defic.	Score	% Seeders
72-41- A	MSU	125	41	33	69	R	4.3	4.2	2.8	5.0	4.00	0
Tall Utah 5275	FM	125	25	28	57	S	3.7	2.5	3.2	3.0	3.40	7
Transgreen	"	124	31	29	66	R	3.9	3.2	4.0	5.0	3.78	57
77-158-M	MSU	121	32	33	68	M	3.7	3.7	3.7	5.0	3.88	0
74-56	"	119	44	32	74	R	4.3	4.3	3.4	4.9	4.15	0
Florimart 19	Sun	113	34	30	56	S	4.2	3.5	3.5	4.2	3.93	0
78-12	MSU	104	48	31	63	MS	4.0	4.0	3.5	5.0	4.08	0
Florimart	Har	99	31	28	58	MR	3.9	3.5	3.4	2.9	3.54	2

The above twelve MSU (D.S.Honma) breeding lines with resistance to seedstalk development in cold weather, and twenty-three commonly grown cvs were seeded in a greenhouse April 13 and transplanted into flats on May 18. From June 2 to 18, the plants were placed in a cold storage room at a temperature of 1°C and a relative humidity of 70% to induce seedstalk development. Fluorescent lights were used in the daytime from June 10 - 18. On June 18, the plants were planted in the field in rows 60 cm apart and 15 cm in the row. Irrigation and other normal growing practices were done when required. At harvest time on September 16, one of the MSU breeding lines and most of the commonly grown cultivars developed seedstalks.

The cultivars are listed in order of tonnes/hectare. *5=most desirable 134 t/ha = 70 T/A = 2000 cartons/acre.
Score is the average of Internal Sucker growth (not shown), Crispness, Stringyness, Compactness, Boron Deficiency ('cat scratches') and yellow leaves (not shown).

The best commonly used cultivars that produced very few seedstalks were:

	t/ha	% Seedstalks	Quality *
Surepak	144	2	4.12
Tendercrisp	159	2	3.67
Summit	147	2	3.57
Florimart 19	113	0	3.93
Bishop	148	3	3.87

The cv Florida 683, most widely used in the Bradford area, rated as follows: 165 84 3.75

CELERY STORAGE CULTIVAR TRIAL - 1982

The cultivars were seeded on May 21 in a greenhouse and transplanted to the field on July 13 in rows 60 cm apart and plants spaced 15 cm in the row, replicated three times.
On October 8, 60 stalks of each cultivar were cut, trimmed and stalks cut 45 cm in length. The stalks were placed in an upright position in pallet boxes. The celery was drenched with water of 12°C which had 1 kg Benlate per 1000 L water added to it. The boxes were placed in a refrigerated storage at a temperature between 0°C and 3°C and a relative humidity between 90 and 99%.
On December 14, after 67 days in storage, the average weight loss was 7.5% and marketable weight varied from 79% to 57%. Most of the loss was due to loss of color of the oldest stems on the stalks. Not as much blackstem was found as in previous years. Blackstem is a black discoloration which appears to be concentrated around the vascular bundles in those petioles that are located just around those of the heart of the stalk.
The cultivars are listed in order of % marketable yield after storage. 5 = most desirable.

		At Harvest		After Storage Period of 67 Days						
						Reasons Unmarketable (% by Weight)				
Cultivar	Source	Av.Wt. /stalk (g)	Quality	% Mkb.	Quality	Storage loss	decay	Loss of color	Pitby	Black stems
Fla 683	Asg	1166	4.1	79	3.8	7	3.5	8	2	0.5
Fla 213	A&C	1109	4.1	77	3.6	7	5.0	6	3	2.0
Clean Cut	Har	991	4.0	76	3.4	9	1.0	9	0	5.0
Fla 683	Sto	1183	4.4	76	4.0	8	4.0	9	2	1.0
Tall Utah 52-70R-Imp.	FM	1033	4.0	74	3.6	7	4.0	11	3	1.0
Impr.Utah 52-70	Sto	1134	4.2	74	3.6	7	2.0	8	6	3.0
Surepak	"	919	4.4	73	3.9	8	3.0	11	1	4.0
Tall Utah 52-70 (213 Str)	"	1122	4.4	73	3.6	9	2.5	11	4	0.5
Tender Crisp	FM	1197	4.3	72	3.7	5	7.0	14	1	1.0
Green Giant	Tak	1346	4.1	57	2.6	8	28.0	4	1	2.0

ONION CULTIVAR TRIALS - 1982

The Main Trial is listed in order of maturity and is replicated 3 times.
The Adaptation Trial is replicated twice, while the Observation trial is non-replicated.

The Date of Maturity is the date when at least 85% of the tops are down.

Stand/meter: 33 plants/m = 10 plants/foot

%#1 Small: is the marketable yield between 32 and 44 mm in diameter, expressed in % of total weight

Yield/ha: is the marketable yield over 44 mm.

Types of Culls: D = Double, U = Undersize, R = Rot, SR = Skin Rot, Rd = Red
W = White, B = Bald, S = Sprouted, T = Thickneck, F = Spongy, soft, not firm

Ave.Weight/bulb: 70 grams = 2.5 oz. = bulb 2" in size
100 grams = 3.5 oz. = bulb 2 1/4" in size

Shape: G = Globe, HG = High Globe, SG = Semi Globe
F = Flat, O = Oblong, T = Top

Score: Average of last 7 marks. 5 = most desirable 1 = least desirable

Crop Management Information

Fertilizer: 1000 kg/ha 10-2-8 + 25 kg/ha Copper sulfate

Seeding: May 5. 52 seeds/m (16/ft) Scatter shoe 5" wide
Seed coated with Pro-Gro and 30 kg/ha 5% Dyfonate plus 10% Thiram applied in the seed furrow.

Insect Control: Diazinon WP. 1.1 kg/ha on July 16 550 mL/ha Dibrom on July 24

Disease Control: 2.2 kg/ha Maneb or Zineb per week beginning June 17

Minor Elements: 7 sprays of 2 kg/ha Manganese Sulphate beginning June 17

No Sidedressing: Water table at 60-70 cm. No irrigation

The onions were pulled Sept.10, windrowed until Sept.24, when they were topped and placed in a forced air and heated storage at 27°C and a relative humidity of 60%. After 10 days, the bulbs were sufficiently dried and cured and the temperature was gradually lowered to 1°C by Dec.9. The relative humidity was kept between 75% and 60%.

ONION MAIN CULTIVAR TRIAL - 1982

Cultivar	Source	Days to Maturity	Stand/meter	Yield		% # 1 Small	% Culls	Type of Culls	Ave. Weight /bulb (g)	Firmness	Uniformity		Color	Skin Thickness	Skinning	Neck Finish	Score
				Tonnes/ha	Bags/Acre						Size	Shape					
Simcoe	Des	105	32	54.5	970	8	1	U	82	4.6	4.1	4.0	4.0	4.3	4.1	4.3	4.20
Rocket	Asg	106	34	49.2	876	13	3	RUD	74	4.1	3.9	4.0	4.0	3.9	3.7	4.3	3.99
Tamarack	Sto	107	33	51.0	908	7	5	DU	77	4.1	4.0	3.3	4.0	4.1	4.0	3.9	3.91
Progress	Har	107	34	54.4	968	10	2	UR	77	3.7	3.8	3.4	3.7	3.9	3.7	4.2	3.77
Aut.Splendour	Cro	107	35	48.0	855	12	7	DUR	73	4.0	4.0	3.7	3.9	4.2	3.8	4.1	3.96
Early Pak	"	108	30	42.4	754	11	3	DR	71	4.3	4.0	3.9	4.0	4.3	4.2	4.6	4.19
Autumn Glo	"	108	32	52.1	927	6	3	DUR	76	4.4	3.9	3.9	3.9	4.2	4.0	4.3	4.09
Garnet	Asg	109	36	49.1	874	8	16	DU	78	4.0	4.1	3.9	4.2	4.0	3.9	4.3	4.06
Mustang	Har	109	37	49.0	872	11	6	D	70	4.6	4.0	4.0	4.6	4.2	4.0	4.5	4.27
Buccaneer Imp.	"	110	30	54.0	961	5	3	D	86	4.4	4.2	3.9	4.3	4.2	3.9	4.4	4.19
Aries	Asg	110	35	53.5	952	10	4	DUR	77	4.2	3.9	3.7	4.0	4.1	3.8	4.3	4.00
Trapp!s #8	Tra	110	24	51.9	922	10	1	UR	72	4.4	4.1	4.1	4.6	4.2	4.1	4.6	4.30
Copper Cache	FM	110	36	52.6	936	11	4	DU	74	4.2	3.9	3.8	4.1	4.3	4.1	4.3	4.10
Ontario M	Asg	110	32	49.6	883	9	9	DU	82	4.5	4.1	3.9	4.2	4.2	4.0	4.2	4.16
Fawn Preview	FM	111	31	53.9	959	8	4	DUR	86	4.4	4.2	4.0	4.3	4.3	4.4	4.2	4.26
Trapp's #6	Tra	111	41	51.7	920	14	2	UR	64	4.2	3.9	4.1	4.1	4.1	4.0	4.4	4.11
Impr.Aut.Spice	Sto	111	32	42.6	759	12	11	DU	73	4.0	3.9	3.8	4.0	4.1	3.9	4.1	3.97
Mucker	Des	111	27	56.8	1012	5	3	RD	100	4.2	4.4	3.9	4.3	4.3	4.2	3.9	4.17
Canada Maple	Sto	111	33	48.2	858	6	4	DU	72	4.3	4.0	3.8	3.9	4.2	4.3	4.2	4.10
Taurus	Asg	113	31	53.0	943	9	5	DUR	85	4.1	4.2	3.8	3.8	4.2	4.2	4.3	4.09
Sunglow	Cro	115	31	52.3	931	8	4	RUD	84	3.6	4.0	3.4	4.0	4.2	4.1	4.1	3.91
Sentinel	Har	115	37	56.5	1005	9	1	UR	74	4.6	4.3	3.8	4.4	4.4	4.3	4.2	4.29
Aut.Keeper	Cro	116	34	50.1	892	11	2	UR	73	4.2	4.0	3.6	3.9	4.2	4.2	4.1	4.03
Russet	Sto	117	32	61.5	1095	6	4	DU	94	3.7	4.3	3.5	4.0	4.1	3.9	3.8	3.90
Exporter	"	120	34	53.7	957	9	2	UDR	76	4.2	4.0	4.0	4.3	4.2	4.2	4.0	4.13

LONG TERM AVERAGES OF SOME OF THE ONION CULTIVARS TESTED IN OUR TRIALS

Cultivar	Source	# of Years	LTA t/ha	LTA B/A	LTA Days to Maturity	Firmness
Early Pak (H337)	Cro	5	52.6	938	107	4.15
Simcoe	Des	7	48.3	860	109	4.19
Rocket	Asg	13	54.6	970	109	3.82
Tamarack	Sto	4	46.4	826	110	4.18
Fawn Preview	FM	10	51.2	912	110	4.04
Trapp #6	Tra	12	54.1	962	110	4.01
Garnet	Asg	12	54.1	962	110	3.77
Mirage	Sto	4	44.2	787	111	4.35
Mustang	Har	12	51.1	910	111	4.05
Buccaneer	"	12	51.3	913	111	4.08
Aries	Asg	8	51.1	909	111	3.96
Taurus	"	8	53.2	946	111	3.84
Progress	Har	7	57.7	1028	111	3.67
Nutmeg	"	10	51.6	919	112	4.29
Trapp #8	Tra	10	56.5	1006	112	4.23
Imp.Autumn Spice	Sto	8	45.8	815	112	3.78
Autumn Glo	BrS	4	53.4	944	113	4.03
Mucker	Des	7	55.6	990	114	4.03
Copper Cache	FM	9	53.7	956	114	3.92
Sunglow	Cro	4	51.3	909	114	3.86
Canada Maple	Sto	13	55.9	995	116	4.23
Ontario M	Asg	7	54.7	970	116	4.11
Autumn Keeper	Cro	6	53.0	942	117	4.15
Storage King	Sto	8	53.9	960	117	3.90
Exporter	"	13	57.9	1029	117	3.74
Russet	"	4	64.6	1149	118	3.90
Sentinel	Har	9	58.8	1046	119	4.26

Note: Long Term Average information of the following cultivars; see our 1979 Variety Trial Report: Pronto S, Super Spice, Autumn Spice, Golden Laker, Sunburst, Autumn Splendour, Spartan Era, Bronze Age, Gladiator, Harvestmore, Northern Oak.

ONION CULTIVAR STORAGE TRIAL - SEP.18,1981 - AUG.10,1982

Cultivar	Source	% Weight Loss In Storage	% Rot By Weight	% Sprouted By Weight	% Soft By Weight	% Mkble By Weight	Firmness
Taurus	Asg	5	0	2	17	76	3.9
Canada Maple	Sto	10	0	1	15	74	4.3
Copper Cache	FM	10	0	1	17	72	4.3
Trapp #6	Tra	10	0	2	16	72	3.6
Trapp #8	"	10	0	2	18	70	4.1
Rocket	Asg	9	0	0	21	70	3.9
Storage King	Sto	10	0	5	15	70	3.8
Sure Crop	Har	12	1	1	17	69	3.9
Fawn Preview	FM	10	0	2	21	67	4.3
Sentinel	Har	11	0	0	23	66	4.4
Nutmeg	"	10	0	4	24	62	4.3
Tamarack	Sto	8	0	5	25	61	3.9
Mustang	Har	9	0	6	21	61	3.7
Mirage	Sto	10	0	14	18	58	4.1
Mucker	Des	10	0	0	32	58	3.8
Early Pak	BrS	11	0	11	24	54	3.5
Aut.Splendour	"	10	0	4	34	52	4.1
Garnet	Asg	10	1	6	31	52	3.2
Aries	"	8	0	4	38	50	3.3
Ontario M	"	10	0	3	40	47	3.4
Autumn Keeper	BrS	11	1	13	32	43	3.2
Autumn Glo	"	12	0	11	39	38	3.9
Progress	Har	11	0	8	45	36	2.8
Russett	Sto	10	0	9	48	33	2.2
Pronto S	Asg	10	0	9	51	30	2.3

RED ONION CULTIVAR STORAGE TRIAL - SEP.18, 1981 - APR.23, 1982

Cultivar	Source	% Weight Loss In Storage	% Sprouts	% Soft	% Rot	% Mkble	Firmness	% Base Swelling
Carmen	Har	3	2	4	0	92	3.9	5
ACX 80163	A&C	1	10	9	0	87	3.0	55
Southport Red Globe	Her	4	6	7	0	84	3.2	70
Carmen	Sto	4	1	15	2	79	3.2	94
Noro	BEJO	4	2	22	0	73	3.3	35
Red Wethersfield	A&C	3	20	3	2	73	3.9	57
Southport Red Globe	Asg	3	18	8	0	71	3.0	75
Red Wethersfield	Her	5	24	2	0	69	3.7	48
Benny's Red	A&C	3	1	29	0	68	2.9	99
Southport Red Globe	"	4	2	34	2	58	2.7	86
Big Red	"	3	2	44	1	51	2.3	93
Ruby	Asg	5	1	44	2	49	2.7	95

Notes:

The onions were sprayed with MH-30 on Aug.28,1981 at 8.5 L/ha in 1100 L water at a time when the tops of most cultivars were down 50%.
The bulbs were pulled Sep.10, topped on Sep.18 and placed in a forced air and temperature controlled storage at 27°C and a relative humidity of 70%.
The temperature was gradually lowered until it reached 1°C by the end of December.

The Red varieties were judged on Apr.23, 1982 when many cultivars appeared to have lost the prime quality.

The Yellow Cooking varieties were placed in a refrigerated storage in the beginning of May, 1982, and judged on Aug.10 after 46 weeks in storage. (5=most desirable)

ONION CULTIVAR ADAPTATION TRIAL - 1982

Cultivar	Source	Days to Maturity	Stand/meter	Yield		% #1 Small	% Culls	Types of Culls	Shape	Ave. Weight /bulb (g)	Firmness	Uniformity		Color	Skin Thickness	Skinning	Neck Finish	Score
				Tonnes/hectare	Bags/Acre							Size	Shape					
05562 Super Sleeper	Har	118	25	52	928	5	4	D	HG	99	4.3	4.3	3.7	4.3	4.3	4.5	3.7	4.16
E.Yellow Globe	"	112	27	60	1063	4	7	DR	G	108	2.9	4.2	3.0	3.5	3.5	3.0	3.2	3.33
Surecrop	"	113	28	52	931	3	9	DU	G	93	4.3	4.3	3.5	4.3	4.2	4.0	3.9	4.07
Gambler	Agw	113	28	59	1052	5	1	--	HG	95	3.2	4.3	2.9	4.0	4.2	4.2	3.9	3.81
Indian Princess	"	113	29	40	718	10	12	DR	G	78	4.5	4.0	3.8	4.5	4.2	4.0	4.3	4.19
Sp.Banner	"	123	28	68	1214	2	2	DU	HG	110	4.0	4.3	3.5	4.3	4.3	4.5	3.7	4.09
Bronze Age	FM	121	30	51	900	6	8	DR	G	86	3.7	4.2	3.2	4.2	4.2	3.9	3.7	3.87
Rialto	Asg	109	30	41	724	10	10	DU	G	73	3.4	4.0	3.2	3.4	3.2	2.9	4.0	3.44
Sierra	"	114	36	54	952	7	17	D	G	84	3.9	4.0	3.7	4.3	4.2	4.0	4.2	4.04
Sp.Banner	Sto	123	30	63	1125	4	4	DR	HG	100	3.5	4.3	3.0	4.0	4.0	4.2	3.2	3.74
Sp.Sleeper	"	117	33	48	854	14	1	--	HG	72	4.0	3.9	3.0	4.2	4.2	4.2	3.5	3.83
Enterprise	"	108	30	49	872	7	4	DR	G	79	4.3	4.2	3.7	3.9	4.3	4.2	4.5	4.16
Mirage	"	109	26	47	842	5	3	DU	G	84	4.3	3.9	3.7	4.0	4.2	4.0	4.0	4.01
Early Harvest	"	107	22	17	293	11	34	DR	G	61	2.9	3.5	3.2	3.4	3.3	2.5	3.5	3.19
Northern Oak	"	122	28	57	1018	5	7	D	HG	99	4.0	4.3	3.9	4.3	4.3	4.3	4.2	4.19
Harvestmore	"	118	30	39	697	14	4	U	G	69	4.5	3.7	3.7	4.3	4.0	4.0	4.3	4.07
Golden Cascade	"	106	25	58	1025	3	3	DU	HG	107	3.2	4.2	3.7	3.5	3.3	3.0	3.9	3.54
7721(Super Duke)	"	121	26	42	742	7	18	DU	G	92	4.0	4.0	3.4	4.2	3.7	3.5	3.7	3.79
Autumn Pride	Cro	122	28	62	1111	3	3	D	HG	102	3.7	4.2	3.3	4.0	4.2	4.0	3.7	3.87
Capable	Des	105	32	51	904	9	4	RdU	HG	78	4.2	4.2	3.2	3.7	4.2	3.7	4.2	3.91
Cuprum	"	109	27	57	1007	3	2	U	G	97	4.5	4.2	4.2	4.5	4.3	4.5	4.3	4.36
Oro	"	108	29	49	876	5	3	UD	HG	78	4.2	3.9	3.3	4.0	3.8	3.5	4.3	3.86
Brahma	"	109	33	56	990	6	5	R	HG	84	3.7	4.0	3.5	4.0	4.0	3.7	3.5	3.77
Reliance	"	109	33	59	1049	3	14	RD	HG	95	2.9	3.9	2.9	3.7	3.4	2.7	3.5	3.29

ONION CULTIVAR ADAPTATION TRIAL - 1982

Cultivar	Source	Days to Maturity	Stand/meter	Yield		% #1 Small	% Culls	Types of Culls	Shape	Ave. Weight /bulb (g)	Firmness	Uniformity		Color	Skin Thickness	Skinning	Neck Finish	Score
				Tonnes/hectare	Bags/Acre							Size	Shape					
Magnum	Des	112	34	66	1169	6	9	BR	HO	99	3.2	4.2	2.9	3.9	3.7	3.2	3.4	3.50
171	"	95	32	19	345	24	15	UD	FG	43	2.7	3.3	2.7	2.7	2.0	2.0	4.0	2.77
Sw.Sandwich	PETO	113	27	72	1283	2	1	--	HG	120	4.2	4.3	4.3	4.5	4.3	4.7	4.2	4.36
Sp.Banner 80	"	121	30	61	1080	3	2	R	G	92	4.3	4.2	3.5	4.2	4.2	4.3	4.0	4.10
Early Harvest 81	"	104	22	24	427	9	6	U	G	53	3.5	3.3	3.7	3.0	3.3	3.0	3.9	3.39
Zodiac	"	140	23	45	801	1	6	RT	G	95	2.7	3.3	3.7	4.0	3.7	3.7	2.3	3.34
Early Canada	Glo	109	33	56	990	4	6	DU	HG	102	3.8	4.3	3.7	3.5	3.9	4.0	4.0	3.89
Matador	Mor	111	31	58	1025	3	11	DR	G	94	3.2	4.0	3.3	4.2	4.0	3.7	3.5	3.70
Exp.Mox.1012	"	113	26	56	990	4	6	DU	HG	102	3.8	4.3	3.7	3.5	3.9	4.0	4.0	3.89
Improved Elite	A&C	126	28	54	966	4	13	DU	HG	101	4.2	4.2	3.4	4.2	4.2	3.9	3.7	3.97
Better Banner	"	120	26	58	1031	5	3	DR	HG	107	4.2	4.3	3.7	4.2	4.2	4.3	3.5	4.06
Abco	"	106	31	69	1235	1	3	DR	HG	101	4.0	3.5	3.5	4.3	4.0	3.7	4.3	3.90
Buffalo	DP	92	33	20	352	24	11	DU	F	41	2.7	3.2	3.7	2.0	2.0	2.0	4.2	2.83
Gambler	PES	121	25	51	914	3	8	RD	HG	102	3.3	4.3	3.7	3.9	4.2	4.0	3.5	3.84
Sw.Sandwich	"	114	24	60	1066	3	3	RU	HG	114	3.8	4.3	3.8	4.7	4.3	4.5	3.8	4.17
Fall Classic	JHK	114	27	36	645	11	1	--	G	67	4.3	3.9	4.0	4.0	4.3	4.5	4.3	4.19
Red Onions																		
Robal	S&G	151	18	3	48	2	79	T	G	42	2.8	2.5	3.2	Red	4.0	4.3	1.0	2.97
Hamburger Red	Her	110	38	9	155	16	46	TD	F	28	3.3	3.0	3.5	"	3.9	3.9	4.2	3.63
Ruby Red	Sto	140	22	48	852	5	2	TR	HG	102	3.4	4.0	3.5	"	4.2	4.3	2.2	3.60
Big Red	A&C	132	23	51	914	3	15	D	HG	116	3.0	3.9	3.2	"	4.0	4.3	2.7	3.52
Carmen (red)	Des	129	31	42	745	8	11	DW	G	72	3.7	4.2	3.5	"	4.3	4.7	2.9	3.88
Rudo	OhE	151	19	7	121	3	67	TD	G	55	3.3	2.9	3.4	"	4.2	4.3	1.0	3.18

ONION CULTIVAR OBSERVATION TRIAL - 1982

Cultivar	Source	Days to Maturity	Stand/meter	Yield		% #1 Small	% Culls	Types of Culls	Shape	Ave.Weight /bulb (g)	Firmness	Uniformity		Color	Skin Thickness	Skinning	Neck Finish	Score
				Tonnes/Hectare	Bags/Acre							Size	Shape					
F 47	JUNG	116	32	60	1063	4	1	--	G	84	5-	4	4+	4+	4	4+	4+	4.27
F 57	"	116	33	50	895	13	1	--	HG	77	4+	4+	4	5-	4+	4+	4	4.27
F 245	"	109	37	57	1021	10	1	--	HG	74	4+	4	4-	4+	4+	4+	4+	4.17
F 247	"	112	35	51	911	11	3	D	G	74	5-	4	4	5-	4+	4	5-	4.34
F 254	"	116	26	37	635	14	2	D	G	71	5-	4	4	5-	4	4	5-	4.30
F 257	"	116	26	53	938	4	1	--	HO	92	5-	4+	4-	5-	4+	4+	4-	4.24
F 452	"	109	34	57	1021	6	2	D	G	80	4+	4	4+	5-	4+	4+	4+	4.31
F 457	"	118	34	61	1076	6	5	D	G	86	4+	4+	4	4+	4+	4+	4+	4.26
F 542	"	116	31	50	890	8	1	--	HG	77	4+	4	4-	4+	4	4-	4+	4.04
F 24	"	112	32	54	952	7	1	--	G	78	5-	4	4+	5-	4	4-	5-	4.30
F 25	"	116	27	50	897	4	3	D	HG	88	4+	4+	4	4+	4+	4+	4-	4.17
H38302	VDH	109	39	35	621	25	6	UD	G	56	5-	4	4+	4+	4+	4	5-	4.33
H38179	"	109	32	41	724	15	5	D	HG	68	4+	4	3+	4	4	4	4	3.95
H39367	"	109	26	35	614	9	4	D	G	69	4-	4-	4-	4	4-	4-	4	3.79
H38375	"	124	29	60	1062	4	1	--	HG	95	4-	4+	4-	4+	4	4+	4-	4.00
H38379	"	104	36	52	926	11	2	U	HG	72	4	4+	4	4	4+	4+	4+	4.17
No.10	Tak	109	25	47	835	8	1	--	G	89	4-	4+	3+	4	4	3+	4	3.80
80-02	"	104	27	52	918	2	9	D	G	93	3+	4+	3+	4-	4-	3+	4+	3.81
R8145	Glo	104	36	49	869	12	3	D	G	69	4+	4	4+	4+	4+	4	5-	4.27
8139	"	106	28	50	890	6	4	D	HG	85	4-	4-	3+	4	4	4-	4-	3.73
8146	"	104	32	43	759	10	4	U	G	67	4+	4-	4+	4	4	4-	4+	4.04
D5556E	Har	106	32	51	904	8	9	D	G	83	4+	4	3+	4	4+	4-	4+	3.99
D275162	"	112	24	46	814	5	1	--	HG	88	5-	4-	4+	4+	4	4	4+	4.27
D5537P	"	112	34	72	1283	3	5	D	HG	100	4+	4+	4	4+	4+	4+	4+	4.26
D5542	"	106	28	49	876	5	4	U	G	85	4+	4-	4-	4	4	4	4+	4.00
2565	Sto	106	37	51	911	16	1	--	HG	72	4	4+	4-	4	4+	4	4-	4.00

ONION CULTIVAR OBSERVATION TRIAL - 1982

Cultivar	Source	Days to Maturity	Stand/meter	Yield		% #1 Small	% Culls	Types of Culls	Shape	Ave. Weight /bulb (g)	Firmness	Uniformity		Color	Skin Thickness	Skinning	Neck Finish	Score
				Tonnes/hectare	Bags/Acre							Size	Shape					
2566	Sto	106	42	68	1207	9	5	U	G	81	5-	4+	4-	4+	4+	4+	4+	4.27
2567	"	104	26	36	635	9	12	D	HG	76	3+	4-	3+	3+	4-	3+	4-	3.47
2568	"	104	26	52	931	3	1	-	G	90	3	4+	3+	3+	4-	3	4-	3.47
2569	"	109	34	46	821	14	3	D	HG	71	3	4-	3+	4	4-	3	4-	3.49
2570	"	109	30	35	614	17	3	D	HG	63	4-	4-	3+	4	4	4	4+	3.86
2571	"	124	29	50	883	1	16	D	G	92	3+	4+	4	4	4+	4+	4-	3.99
H81ACX10	NIPB	104	25	30	531	9	14	D	G	69	3	3+	3	3+	3+	3-	4	3.23
H81ACX16	"	104	23	28	504	12	5	U	G	63	4+	4	4	4-	4+	4	4+	4.09
AC81-8135H	"	95	34	15	269	33	10	S	F	35	2+	3	3+	2	2	2	4+	2.70
H81ACX8	"	124	21	47	828	3	17	D	G	119	3+	4-	3+	Rd	4-	4+	4-	3.67
H81ACX15	"	109	17	26	469	2	30	D	SG	101	3	4	4+	3+	3+	3+	4-	3.56
AC8118	"	124	17	47	842	1	6	D	SG	128	4-	4+	3+	4+	4	4	3+	3.84
H81ACX14	"	112	15	33	580	3	4	D	G	102	4-	4+	4	4-	4	4-	4-	3.87
AC7999	"	106	4	2	35	4	5	U	G	38	3+	3	4+	3	3-	3+	4	3.37
H81ACX12	"	106	15	20	359	7	29	D	G	94	3-	4-	3	3	3	3-	3+	3.06
H81ACX4	"	116	21	32	573	7	17	D	G	90	4	3+	4	4-	4	4-	4-	3.77
H81ACX20	"	106	20	19	331	4	50	D	G	90	3	3+	3+	4-	3	3+	4	3.37
H81ACX2	"	112	19	47	828	3	12	D	G	123	4	4+	4+	5-	4+	4+	4	4.27
AC7893	"	109	20	40	704	3	13	D	HG	105	3	3+	3	4-	4-	3+	3	3.29
H81ACX842	"	124	26	38	683	14	6	D	G	81	3+	4	3+	4+	4	4-	3+	3.70
AC81-8122	"	116	18	47	828	2	1	-	G	115	3+	4+	3+	4	4-	4-	3+	3.66
AC8116	"	126	14	43	759	1	3	R	HG	138	3	4+	4+	4+	4-	4-	3-	3.71
X220W20	FM	104	29	37	655	17	2	-	G	67	4+	4	4+	4+	4+	4	5-	4.27
X220W4	"	104	38	57	1014	11	1	-	HG	75	4+	4-	4-	4+	4	4-	4+	4.00
X222W4	"	104	33	39	697	16	3	U	G	64	4	4-	4+	4+	4+	4+	4+	4.17
X220W2	"	106	22	35	621	8	8	D	HG	84	4+	4+	4-	4+	4+	4+	4+	4.21

ONION CULTIVAR OBSERVATION TRIAL - 1982

Cultivar	Source	Days to Maturity	Stand/meter	Yield		% #1 Small	% Culls	Types of Culls	Shape	Ave.Weight /bulb (g)	Firmness	Uniformity		Color	Skin Thickness	Skinning	Neck Finish	Score
				Tonnes/hectare	Bags/Acre							Size	Shape					
X221W2	FM	124	27	49	876	10	5	F	G	90	4+	4+	4-	4+	4+	4+	4-	4.13
X224W2	"	118	27	54	966	5	5	R	G	86	4+	4+	4	5-	4+	4+	4-	4.23
X227W2	"	109	26	52	925	6	1	-	HG	92	4-	4+	4	4+	4+	4	4	4.09
X227W3	"	109	30	55	973	2	17	D	HO	100	3	4	3	4	4	4-	3	3.53
X227W20	"	109	34	50	883	13	4	U	HG	77	4+	4+	3	4+	4+	4+	4+	4.11
X225W2	"	116	18	45	807	2	1	-	HO	111	4-	4+	3	4+	4+	4+	3+	3.89
X220W1	"	112	22	56	993	1	3	D	HG	114	4+	4+	4+	4+	4	4-	4+	4.17
X224W1	"	112	29	56	993	5	8	-	G	97	4+	4+	4	5-	4+	4+	4	4.27
X225W1	"	112	32	59	1056	7	1	-	HG	88	4+	4+	4	4+	4+	4+	4+	4.26
X226W1	"	109	26	46	821	8	1	-	G	85	4+	4+	4	5-	4	4-	4+	4.19
X220W3	"	112	27	47	835	9	2	-	G	85	4+	4	4-	5-	4	4	4+	4.14
X220W20	"	116	27	49	869	3	4	D	HG	90	4+	4-	4-	4+	4+	4+	4-	4.04
X232W3	"	116	26	50	890	6	5	D	G	96	4+	4	4+	4+	4	4-	4-	4.04
X229W3	"	109	24	39	690	7	7	U	HG	83	4+	4	3+	4+	4	4-	4+	3.99
X229W20	"	118	26	53	945	4	2	D	HG	96	4	4+	3	4	4+	4+	4-	3.94
X228W2	"	112	30	47	842	10	1	-	HG	78	4+	4	3+	4	4	4	4+	3.99
X231W3	"	120	42	60	1069	11	2	D	HG	71	4	3+	3+	4-	4+	4-	4-	3.71
X231W20	"	118	38	61	1090	10	3	R	G	80	4+	4-	3+	4+	4+	4+	4	4.03
X231W9	"	116	23	53	952	4	1	-	HG	105	4+	4+	4-	4	4+	4+	4	4.13
X219W2	"	118	19	38	683	8	1	-	G	94	4+	4	3+	4+	4+	4	4-	3.99
X219W9	"	109	26	41	738	11	2	R	HO	79	4-	4	3	4+	4+	4+	4-	3.90
X219W20	"	109	28	71	1270	3	1	-	T	112	4+	4+	4+	5-	4+	5-	4+	4.41
(611x611-1)2399(Sp.Banner)	USDA	116	38	42	745	22	1	-	G	63	5-	4-	4+	4+	4+	4+	4+	4.27
(2935x1459)4535(Sp.Sleeper)	"	109	36	61	1083	9	1	-	HO	81	4-	4+	3+	5-	4+	4+	4-	4.04
(5718x8155)826(Sweet Sandwich)Lot 4	"	106	28	67	1221	3	1	-	T	110	4	4+	4+	5-	4	4-	4-	4.10

ONION CULTIVAR OBSERVATION TRIAL - 1982

Cultivar	Source	Days to Maturity	Stand/meter	Yield		% #1 Small	% Culls	Types of Culls	Shape	Ave.Weight /bulb (g)	Firmness	Uniformity		Color	Skin Thickness	Skinning	Neck Finish	Score
				Tonnes/hec.	Bags/Acre							Size	Shape					
(5718x8155)826 (Sweet Sandwich) Lot 5																		
	USDA	109	24	73	1304	1	1	-	T	135	4+	4+	4+	5-	4+	4+	4+	4.36
EYG 155	Des	109	34	40	718	17	2	U	HG	65	3+	3+	3	3+	4-	3+	4	3.41
PSx31877	PETO	104	25	28	490	10	27	D	G	77	3+	4-	4+	3+	4-	3	4+	3.66
Crk N53	Cro	106	30	52	918	6	1	-	G	81	5-	4+	4	4+	4+	4	4+	4.27
Crk N95	"	109	28	54	966	3	2	U	HG	89	4-	4+	4-	4+	4+	4+	4	4.09
Crk H23	"	112	28	45	800	11	1	-	G	78	5-	4	4+	5-	4+	4+	5-	4.43
Crk H283	"	104	31	65	1159	5	3	D	HG	98	3	4+	4-	4-	4-	4-	3+	3.63
Crk H284	"	126	32	74	1318	4	1	-	HG	106	3+	4+	3+	4	4	4-	3	3.66
Crk H285	"	109	31	59	1049	5	8	D	HG	96	3	4+	3	4-	4-	3+	3	3.43
Crk H460	"	106	37	51	911	10	3	U	G	69	4+	4-	3+	4	4+	4	4+	3.99
Crk W444	"	118	29	61	1076	6	8	D	HG	104	3	4+	4-	4	4+	4+	3-	3.76
Crk W748	"	109	25	45	793	5	5	R	G	87	4	4-	3+	4	4+	4	4-	3.86
Crk W767	"	109	28	59	1056	5	-	-	HG	98	4	4+	3+	4	4	4	4+	3.99
Crk W771	"	109	23	50	890	3	4	D	HG	101	3+	3+	4	4-	4-	3+	3-	3.43
Crk W783	"	106	34	47	835	11	1	-	G	69	4+	4	4	4+	4-	4-	5-	4.10
Crk W788	"	106	37	50	897	13	1	-	HG	68	4	4-	3	4-	4	4-	4	3.73
Crk W793	"	106	21	46	814	6	2	-	G	103	4	4-	3+	4-	4	4-	3+	3.67
XPH 23	Asg	106	29	42	752	6	8	D	G	75	4-	4	3+	3	3+	3	4+	3.51
XPH 25	"	104	36	50	897	9	7	D	HO	73	3	4	3	3+	4-	3+	3-	3.29
XPH 194N	"	106	30	47	835	9	5	D	G	78	5-	4	4+	5-	4	4-	4+	4.24
XPH 210	"	106	41	32	566	20	18	D	G	55	3-	3+	4+	3	3-	3-	4	3.24
XPH 419 (Vega)	"	109	33	47	835	11	4	R	G	72	3+	4+	4	4-	4-	3	4-	3.67
XPH 428 (Armanda)	"	116	28	34	607	6	23	R	G	77	3-	4-	3+	4	4-	3+	2	3.24
XPH 537	"	109	21	43	759	5	6	D	G	100	3+	4	4+	4-	3+	3-	3+	3.51
XPH 538	"	109	34	53	938	8	3	D	G	77	4+	4	4+	4-	4+	4	4+	4.13
XPH 553	"	106	32	44	780	13	1	-	G	70	3	3+	3-	3+	3+	3	4	3.23

ONION CULTIVAR OBSERVATION TRIAL - 1982

Cultivar	Source	Days to Maturity	Stand/meter	Yield		% #1 Small	Culls	Types of Culls	Shape	Ave. Weight /bulb (g)	Firmness	Uniformity		Color	Skin Thickness	Skinning	Neck Finish	Score
				Tonnes/hec.	Bags/Acre							Size	Shape					
XPH 592	Asg	104	41	49	876	17	5	D	G	68	3	4-	3	3+	4-	3+	4	3.43
XPH 595	"	109	33	52	918	5	14	D	G	83	3-	3+	4-	3	3-	2	4-	3.01
XPH 673 (Yula)	"	104	32	40	704	7	18	F	G	72	3-	4-	4	4-	3	3-	4-	3.36
XPH 688	"	109	26	43	759	11	10	D	G	87	5-	4	4	4	4+	4-	4+	4.14
XPH 691	"	109	30	52	931	7	1	-	HG	82	4-	4+	3+	4	4	4	4+	3.94
XPH 737	"	109	33	49	876	11	1	-	G	75	4+	4	4+	4+	4	4-	4+	4.13
XPH 738	"	112	33	59	1042	5	1	-	G	82	4	4	3+	4+	4	4	4-	3.90
XPH 739	"	109	38	75	1338	4	1	-	G	89	3	4+	4	4	4-	3+	3+	3.66
XPH 3207	"	112	25	43	766	4	8	D	G	84	4-	4+	4+	4	4+	4	4+	4.13
XPH 3215	"	109	28	75	1338	1	1	-	HO	119	4	4+	4-	4+	4+	4+	4-	4.09
XPH 3220	"	109	36	35	621	25	2	U	G	58	4-	4-	4-	4-	4-	4-	4	3.74
XPH 3230	"	126	30	64	1131	5	2	U	HT	99	4	4+	3+	4+	4+	4+	4-	4.03
XPH 3231	"	116	36	64	1135	8	4	RD	HG	89	4-	4	3+	4	4	4-	3+	3.71
XP 638	Agw	117	27	43	769	7	12	D	G	85	4	4	3+	4	4	4-	4-	3.84
ACX 801615	A&C	106	26	47	842	3	9	D	G	90	3+	4	3+	3+	3+	3-	4	3.41
AV 1241	Sun	109	29	61	1083	5	1	-	HG	96	4+	4+	4-	4+	4+	4	4+	4.17
W407AXW2028	UW	106	36	29	524	32	1	-	G	55	5-	4	4+	5-	4+	4+	5-	4.43
W419AXW202B	"	109	27	51+	904	5	3	R	G	90	4+	4+	4	4+	4+	4	4+	4.21
W429AXW202B	"	106	37	51	904	11	1	-	G	68	4+	4	4+	4-	4+	4	5-	4.19
W419AXW52B	"	106	38	60	1076	4	7	D	G	78	4+	4+	3+	4+	4	4+	4+	4.11
W420AXW52B	"	106	36	53	952	8	1	-	G	72	4+	4	4+	4+	4	4-	5-	4.19
W429AXW52B	"	109	35	48	862	13	1	-	HG	70	4+	4-	3+	4	4	4-	4+	3.90
F24AXW52B	"	109	32	36	635	15	4	U	G	62	3	3+	3+	3-	3	2	3+	2.94

SHALLOTS - 1982

5.4 kg of the cvs Sante and .85 kg of Yellow were planted May 20 in a deep muck. Normal growing practices as done for the growing of yellow cooking onions from seed were followed.
Harvesting took place Sept.13 and after 10 days in a windrow, the bulbs were placed in a forced air, temperature controlled storage. The temperature was raised to 27°C to dry the bulbs and the relative humidity was about 70%.
The temperature was gradually lowered to 1°C by December 15, 1981.

Data was taken on December 17.

	Sante	Yellow
Number of bulbs over 44 mm	147	0
" " " under 44 mm	440	105
Marketable yield over 44 mm	7.7kg (11.3t/ha)	0
" " under 44 mm	10.1kg (15.0t/ha)	1.3 kg (5.75 t/ha)
Ave.Weight/bulb (g)	30.3	12.4
Not Marketable	6.9%	12.9%
Firmness *	4+	3+
Color	Bronze	Yellow
Skin Thickness *	4	3
Skinning *	4	3
Seeders	2%	0%

* 5.0 = most desirable

All during the growing season, it was very obvious that the Sante was far superior in yield and quality to the standard variety.

GREENHOUSE SEEDLESS CUCUMBER VARIETY TRIAL ON ORGANIC SOIL, SPRING 1982

Nine cultivars were grown in a glass house in a non-replicated trial on hills covered with black plastic. The temperatures were set at 18°C at night and 22°C in the daytime, from planting time (Feb.16) until harvest started on March 18. The night temperatures were raised in 2 stages beginning 2 hours before sunrise.

During the harvest of the stem fruits, the temperatures were adjusted to 17°C and 23°C respectively, and after that, to 15°C and 25°C respectively. Venting was set at 27°C.

		Number marketable fruit/m^2 to:										Ave. Weight	
Cultivar	Source	Apr.10	May 1	May 22	June 12	July 2	% X	% Lge	% Med.	% Sml.	% #2	kg/m^2	/frt (g)
Farbiola	VDB & DeR	14.0	22.0	32.9	47.3	57.4	16	43	31	7	3	32.7	569
Famosa	"	14.0	22.4	36.4	44.4	54.8	6	45	39	8	2	31.4	574
Sandra	Sl. & Gr.	15.2	22.1	32.8	39.7	48.2	18	40	27	12	3	28.2	585
V-5	VDB & DeR	12.8	20.0	34.4	44.0	54.1	0	7	55	35	3	27.8	514
K 8468	Sl. & Gr.	11.6	18.1	26.5	33.5	43.5	19	42	20	16	3	25.2	579
Corona	VDB & DeR	12.9	19.4	29.5	35.7	42.2	18	41	33	5.5	2.5	25.0	593
K 8287	Sl. & Gr.	9.7	16.7	26.2	32.4	40.5	28	43	17	9	3	23.9	590
Farona	VDB & DeR	13.0	20.0	27.6	34.7	41.2	12.5	37.5	35	12.5	2.5	22.7	551
XPH 1384	Asgrow	7.0	11.3	18.9	25.5	36.3	31	46	14	7	2	22.7	626

Note: Due to poor development of the guard row, the first 4 cvs listed received more light.

For detailed report see: Annual Report, 1982.

GREENHOUSE SEEDLESS CUCUMBER LOW NIGHT TEMPERATURE TRIAL ON ORGANIC SOIL, 1982.

The cultivars Corona and Farona were planted Feb. 16 in a deep peat soil on hills 25 cm high, half of which were covered with black plastic. The experiment was conducted in two glass greenhouses, one of which had the temperatures set as follows:

	Night (C°)	Day (C°)
Prior to harvest	18	22
During harvest of stem frts	17	23
During remainder of harv.	15	25

Two hours before sunrise, the night temperatures were raised in two stages to the required day temperatures 22°C, 23°C and 25°C, respectively.

The second glass house had the temperature set at 21°C day and night. The experiment was discontinued on July 2nd.

Results

1) The soil temperatures in the black plastic covered hills at a depth of 15 cm were 1 1/2° to 2 1/2° higher than in the not-covered hill, resulting in an increase in the number of fruits/m^2, of 7.8% in the even temperature house and 18.1% in the low night temperature house.
2) In the low night temperature house, the harvest started 4 days earlier, the fruits were longer and the fruits were heavier (576 g compared to 554 g).
3) In the even temperature house, 5 more fruits were harvested per m^2.
4) When comparing the early yield (at 18°C night temp.) with the yield later in the season, it appears that the minimum night temperature should be somewhat higher than 15°C, probably 16° - 17°C.

CELERY PLANTING SYSTEMS TRIAL, 1982

The celery cultivar Improved 52-70 was seeded on Feb. 3, 1982 in styrofoam and in plastic plant trays and placed in a greenhouse. The soilless mixture "A.S.B." was used as a growing medium. The plants in the plastic trays were greener and larger than those in the styrofoam trays.

On May 7, the plants were planted in a field in a 4 times replicated trial in rows 60 cm apart and 16 cm in the row. The removal of the plants from the plastic trays did not create any problem. 7.3% of the plants out of the styrofoam trays broke off at planting time, and of another 12.9% plants, 50% or more of the soil stayed in the trays.
During the growing season in the field, no obvious differences were observed except close to harvest when more seedstalks developed in the plants from the styrofoam trays. Harvest took place on August 4 and data was taken from 10 stalks of each replication.

Type of Trays	Trimmed Wt. Kg	% Trim Loss	% Seeders
Styrofoam	14.9	31.3	5.5
Plastic	15.4	26.6	0.9

Conclusion:

In this experiment, it was found that the plants in the plastic trays:

1) developed better in the greenhouse
2) were easier to remove at transplanting to the field
3) produced stalks with less sucker growth
4) produced fewer seeders.

See "ANNUAL REPORT" for detailed results.

EFFECT OF NITROGEN ON STORAGE QUALITY OF CELERY

Ammonium Nitrate was applied at rates of 0 to 900 kg/ha to a field of celery. See Table below.

All the treatments were replicated three times. The sidedressings were drilled into the soil and irrigation was used after, if necessary. Above average rainfall occurred on July 17-18 (47 mm). Forty stalks per plot were harvested on Oct. 5 and placed in an upright position in pallet boxes in a refrigerated storage at 1°C and 95% relative humidity. The celery was drenched with Benlate at 1 kg/1000 L water. After 72 days, data was taken.

TABLE

Ammonium Nitrate in kg/ha				At Harvest		After 72 days in Storage	
Before Planting	Sidedressings Aug.16	Aug.30	Sep.8	Marketable t/ha	Quality*	% Marketable	Quality *
0	0	0	0	130	4.6	60	3.1
200	100	0	0	128	4.7	67	3.4
400	100	100	0	130	4.4	64	3.1
600	100	100	100	127	4.6	61	3.0
900	200	200	200	131	4.2	65	3.5

There were very little differences in yield and in quality. The loss of marketable product was mostly due to loss of color (average 13%). The other reasons were respiration loss (8%), pithyness (6%), decay (5%) and blackstem (3%).

For detailed report, see Annual Report, 1982.

EARLY CELERY TUNNEL TRIAL, 1982

Celery was grown under three types of plastic tunnels. The treatments involved were:

1. Opaque film, tunnel 60 cm high
2. Clear film with 35,000 slits/m^2, stretched across the plants (XIRO).
3. Opaque film, tunnel 30 cm high
4. No Cover

Warm weather in May adversely affected growth of plants under all tunnel treatments, causing damage and loss of plants. Ventilation was given to the celery under the high and low tunnels after 2 weeks. The clear film was left undisturbed and allowed to expand as the crop developed. The results showed that the tunnels had an adverse effect on the development of celery plants, probably due to the abnormally warm and sunny weather in May. Celery under the clear slitted plastic showed a severe Boron deficiency. These symptoms were also found in the high tunnel, but at a much lesser degree. For detailed report, see Annual Report, 1982.

HERBICIDES IN CARROTS, 1982

The cultivar Chancellor was seeded in muck soil in triple rows 50 cm apart on May 27.

Treatments: One half of all plots received a pre-emergence application of prometryne at 1.75 kg/ha ai or monolinuron at 1.1 kg/ha ai.

Post-emergence treatments:

(1) Metobromuron (Patoran 670 FW) at 1 kg/ha ai at 1st true leaf
(2) " " at 1 kg/ha ai at 3rd true leaf
(3) " " at 1 kg/ha ai at 8 cm high
(4) Monolinuron (Afesin) at 1 kg/ha ai at 1st true leaf
(5) " " at 1 kg/ha ai at 3rd true leaf
(6) " " at 1 kg/ha ai at 8 cm high

Treatments were replicated four times.

Results:

The combinations of pre and post emergence treatments gave excellent weed control.
The combinations of Monolinuron pre and post emergence resulted in some crop injury in all plots, with one severe enough to reduce the final yield by 15.8%.
The combination of Prometryne pre and Monolinuron post emergence also caused some injury, but no reduction of final yield.
The Monolinuron, post emergence only treatment, gave good control, but also some crop injury - mostly on the last application.
The Metobromuron, post emergence only treatment, gave not as good control, and some slight crop injury.

WEED CONTROL IN CARROTS WITH MULTIPLE APPLICATIONS WITH REDUCED RATES OF LINURON

On muck soils, the herbicide linuron is usually applied at 1.1 kg ai/ha post emergence after the carrots are 8 cm high. Groundsel, a difficult weed to control, is by that time well established and in some years, linuron gives poor control. In an effort to improve control, linuron was applied 3 times at earlier stages at a third of the rate to a field of carrots seeded on May 27, 1982 with the cultivar Chancellor in rows 50 cm apart.

Post emergence applications; .37 kg/ha ai at 1st true leaf followed by
.37 kg/ha ai at 3rd true leaf followed by
.37 kg/ha ai after 8 cm high

This treatment was compared to 1.1 kg/ha ai after the plants were 8 cm high. Replicated 4 times.
One-half of the plots received a pre-emergence application of prometryn at 1.75 kg/ha ai or monolinuron at 1.1 kg/ha ai.

Results:

Weed control was excellent where both pre and post emergence treatments were used. Only very few weeds were observed in some of the plots where reduced rates of linuron (post emergence only) were used. Yield differences were not significant. It should be noted that a severe rain and hail storm took place on the day of the first reduced rate of linuron application. No crop damage was observed except a slight discoloration of the foliage which usually occurs after the normal 1.1 kg/ha ai application.

For detailed report on both of the above Trials, see Annual Report, 1982.

SPANISH ONIONS PLANTING SYSTEMS AND TUNNEL STUDY, 1982

The cultivar Sierra was seeded March 18 in a greenhouse.

Planting Systems used:

a) plastic trays similar to the "Speedling" system
b) compressed soil blocks
c) 'Jiffy Seven' peat pellets
d) regular flats

Plants were transplanted to a field of deep muck on May 13

Field Treatments:

a) Opaque plastic film tunnels
b) "XIRO" clear plastic protection film
c) Not covered

The weather was unusually warm after planting, having an adverse effect on the development of the crop, protected by the above treatments.

Results:

	% Emergence
Soil blocks	99.5%
Jiffy Seven	92.0%
Plastic Trays	71.0%

1) 19% of the plants of the plastic trays broke off when removed.
2) There was no significant difference in yield and quality between the plants out of the flats, plastic trays or the Jiffy Seven pots.
3) The soil block plants had the largest yield and size, but matured the latest.
4) The XIRO protection film, which was left on the longest, reduced the yield, produced very few seedstalks, but had a very high percentage of doubles.

EFFECT OF HERBICIDES ON BARLEY WINDBREAK IN ONIONS

Rocket onions were seeded in rows alternately 48 and 36 cm apart. A row of Bruce barley was seeded (66 seeds/m) in the center of each bed of 4 rows, between two rows that were 48 cm apart. Paraquat (Gramoxone), allidochlor (Randox) and niclofen (Tok) were used pre- and/or post-emergence and compared with paraquat, chlorpropham (CIPC) and ioxynil (Totril).

Paraquat caused severe injury to the barley at post-6 cm stage but not at emergence. Some higher rates of chlorpropham and ioxynil tank mixes were injurious to both onions and barley.

Sethoxydim 0.35 kg ai/ha + Assist 0.5% (1.9 L Poast + 2.75 L Assist in 550 L water/ha) eradicated the barley over a 3 week period without injury to the onions.

Weed control was best with allidochlor alone, or in combination with chlorpropham (pre-) or niclofen (post-).
For more information, see Annual Report, 1982.